A CULTURAL HISTORY OF BATHING IN LATE ANTIQUITY AND EARLY BYZANTIUM

Michal Zytka

A Cultural History of Bathing in Late Antiquity and Early Byzantium

This book discusses social, religious and medical attitudes towards bathing in Late Antiquity. It examines the place of bathing in late Roman and early Byzantine society as seen in the literary, historical and documentary sources from the late antique period.

The author argues that bathing became one of the most important elements in defining what it meant to be a Roman; indeed, the social and cultural value of bathing in the context of late Roman society more than justified the efforts and expense put into preserving bathing establishments and the associated culture.

The book contributes a unique perspective to understanding the changes and transformations undergone by the bathing culture of the day, and illustrates the important role played by this culture in contributing to the transitional character of the late antique period. In his examination of the attitudes of medical professionals and laymen alike, and the focus on its recuperative utility, Zytka provides an innovative and detailed approach to bathing.

Michal Zytka, having obtained his MA at Łódź University, Poland, continued his research career at Cardiff University where he completed his doctoral thesis. Following a period of freelance editorial and translation work, he is now also pursuing a career in the Civil Service. He is a co-translator and the English language editor of *Cereals of antiquity and early Byzantine times: wheat and barley in medical sources (second to seventh century AD)*, published in the Byzantine Lodziensia series, Łódź 2014, and of the forthcoming *The Bulgarian state in 927–969: the epoch of Tsar Peter I.*

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To my parents

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Abbreviations

ANF – A. Roberts, J. Donaldson, A. Cleveland Coxe (eds.), *The Ante-Nicene fathers*, Edinburgh 1885
CIC – *Corpus Iuris Civilis*, S. P. Scott (ed. and transl.), *The civil law*, Cincinnati 1932
CMG – *Corpus Medicorum Graecorum*
LCL – Loeb Classical Library
MPG – J. P. Migne (ed.), *Patrologia Graeca*, Paris 1857–1866
NPNF – P. Schaff, H. Wace (eds.), *A select library of the Nicene and Post-Nicene fathers of the Christian Church*, Edinburgh 1886–1900
NRSV – W. A. Meeks, J. M. Bassler (eds.), *The HarperCollins study Bible. New revised standard version*, New York 1989

Introduction

The goal of this book is the examination of the cultural, religious and therapeutic functions of Roman baths during Late Antiquity, as they are presented in a wide range of primary literary sources, as well as examining how these subjects have been addressed in current research. My aim was, primarily, the analysis of previously un-researched aspects of bathing during this period (such as medicinal uses of bathing) and to address the issues that have been discussed in the past but have not been resolved conclusively (such as the matter of nudity and mixed-sex bathing). In particular, I set out to examine the changes that occurred in the bathing culture during this time and devoted special attention to how the perceptions of bathing were presented in the contemporary sources. This was achieved through the investigation of passages from a wide range of texts mentioning baths and bathing and subsequently drawing conclusions based on the analysis of the primary sources. As the primary focus of the present book is on the cultural history, perceptions of those who lived during Late Antiquity and their self-image, the archaeological evidence was given relatively little attention – a decision made easier by the relative abundance of works examining physical remains of Roman bath-houses.

In particular, I wanted to identify and examine the possible roles and functions of bath-houses for the Romans. I examined the descriptions of bathing and bathers and attempted to determine the reasons for which bath-houses enjoyed such high popularity in Roman society in Late Antiquity. By doing this, I strove to further expand the understanding of one of the most important elements of the social life in the Roman Empire. Furthermore, I intended to determine the extent to which the Romans of that time themselves (or more specifically, the educated elite who produced the literary sources I used) appreciated – or not – the significance of bathing for their society and its place in everyday life. In the first chapter in particular, I made an attempt to determine the extent to which bath-houses served as cultural institutions and places of social interaction, and whether the importance of bath-houses as places where such activities took place changed during this period.

Accepting the view that Late Antiquity was a period of change and transformation (an issue that will be discussed in a later part of the introduction), I set out to identify, examine, analyse and summarily discuss the factors

that contributed to the changes in the infrastructure necessary to support bathing – such as water supply systems and the bath-houses themselves – during this time period. Subsequently, I focused on determining the influence these might have had on everyday bathing customs and the popular perception of bathing.

This is followed in the second chapter by an attempt to establish whether it is possible to talk about the significance of Christianity in the developments concerning, and transformation of, bathing in Late Antiquity. The degree of continuity and change in bathing practices and social norms is examined there from the perspective of how – if at all – the ascendant religion made its mark on them, and whether the potential changes might have been the result of factors other than the new religion. In particular, I explored the attitudes of representatives of the Church towards baths and bathing, focusing on such aspects as the perceptions of, and attitudes towards, the human body and sexuality, wealth and luxury, social life and the influence, if any, of bathing culture and customs on the language and activities of the Church in general.

In the third chapter my goal was to establish the degree to which bathing and washing were incorporated into the medical practice of the day, basing my inquiry primarily on the medical compendium of Paul of Aegina, passages found in the work of Alexander of Tralles and references to older medical authorities, but also on the perception of the medical profession in the texts of authors without a medical background. My secondary goals here included determining the degree of continuity and possible differences in the use of water and bathing in the medical profession during the Late Antiquity compared to the earlier period, and ascertaining the importance of bath-houses and bathing in general to the medical profession during this time.

Chronological and geographical boundaries

The geographic focus of the dissertation is primarily on the areas that originally constituted the Eastern Roman Empire, and what subsequently came to be called the Byzantine Empire. This commonly used term denoting the Eastern part of the state established by the Romans is problematic in itself; not invented until well after the collapse of the entity it describes, its starting date cannot be unequivocally given in any but an arbitrary manner. Events to which one could point as symbolic dates of the beginning of the Byzantine Empire may include the reforms of Diocletian (284–305) and the beginning of tetrarchy; the consecration of Constantinople in May 330; the division of the Roman state after the death of Theodosius I (402–450) between his sons, Arcadius (395–408) and Honorius (393–423), in 395; the fall of the old Rome and the collapse of the Empire in the West in 476; perhaps even the reforms undertaken during the reign of Heraclius (610–641), changing the administrative arrangement of the Empire and recognising Greek as the official language within the Empire. Within this book I wished to avoid the implications of using geographic terms; it should be assumed that any

Map 1 Map of the Roman Empire during the early 6th century. The indicated locations contain points of interest most relevant to this study.

names and descriptions, unless it is indicated otherwise, are used for the sake of convenience. For the purpose of this work, I used the term 'Eastern Roman Empire' to refer to the part of the Roman state that was governed from Constantinople (and post 476 to its entirety), and used the terms 'the East' and 'the West' as a shorthand for the Eastern and Western parts of the Roman Empire; in the case of the latter, particularly when the period after 476 is discussed, 'the West' refers to the geographic area rather than a political entity.

Since this work deals with subjects, sources and events that belong almost exclusively (albeit with notable exceptions) to the period post 300 AD, in most cases the date is given alone, without indicating whether it belongs prior or post 1 AD; in such cases, it should be assumed the date is referring to the globally recognised Common Era. Where appropriate or necessary, the AD or BC abbreviation has been added. Given the controversy surrounding the use of both AD and CE styles of dating, it should be noted here that the choice of the style of dating is based purely on traditional and long-established scholarly practice and should not be treated as an expression of the author's political or religious sentiments. For rulers, the provided dates are of their reign; for all others, the dates of their birth and death, if known.

The period examined stretches from the end of the 3rd century AD, or beginnings of the Dominate, to the first half of the 7th century. An appropriate symbolic date here would be 626, the year of the Avar raid on Constantinople, which (among perhaps more significant consequences which are less relevant from the perspective of this book) resulted in the cutting of the aqueduct completed by Valens (364–375), one of the key elements of Constantinople's water supply; the damage was repaired only in 758. The Arabic expansion and considerable territorial losses of the Roman state in the East that followed soon after constitute another terminus for my investigation, although, when appropriate for providing additional context or establishing basic facts, both earlier and later events will be mentioned. In regards to literature, the dates of composition of Paul of Aegina's (ca. 625 – ca. 690) medical compendium and of the anonymous, 7th-century *Miracles of St. Artemios* can also be treated as symbolic cut-off points of antiquity. These works, still drawing heavily from the earlier heritage, are at the same time displaying qualities that make them belong equally well to the mediaeval period. For the purpose of this work, I am going to refer to the whole of the transitory period, stretching from the late 3rd to early 7th centuries, as 'Late Antiquity' and treat it as a separate chronological entity, with multiple characteristics differentiating it from both the ancient and mediaeval eras. The name itself is problematic; it implies a continuation of the older trends, while at the same time potentially indicating inferiority of the new developments occurring during this period. In the following work I have striven for a balanced approach. In general, Late Antiquity can be briefly characterised as a period during which the processes and phenomena described below became more prominent.

One of the key factors was the gradual decline of the local government resulting from increasing centralisation and the decreasing political influence and prestige of the local elites that began with the reforms of Diocletian (the *curiales* were burdened with additional financial responsibilities which became increasingly difficult to bear during the 4th century, to the point where the previously prestigious role started to be actively evaded),[1] combined with an increased role of the spiritual leaders of the communities in their everyday existence from the 4th century onwards.

Shrinking of cities became notable, as many of them became partially, or even completely, depopulated – as a result of economic and social changes or hostile military activity (in particular from the 5th century onwards). Another cause of this was an increased need for defensibility; often only a part of the city would end up being protected by the hastily erected walls, and much of its existing infrastructure would be either disassembled (for building materials), reused in a different capacity or altogether abandoned. Finally, partial ruralisation became a feature of many of the cities as their population decreased.

The increasing influence of Christianity and the changes it brought in the spheres of not only religion, but also politics, is another notable development of the time. Accompanied by the burgeoning role of bishops, who occasionally became real leaders of their cities, and the increased and visible presence of clergymen and devotees of the ascendant faith, Christianity gradually came to dominate the spheres of culture (literature, art, architecture) and social life. The classical style in literature and art gradually became abandoned and replaced by new forms – often strongly inspired by the old ones, but nonetheless adapted to the new circumstances and, not infrequently, needs of the new religion. Piety and charity became, at least apparently, the leading values, while the older ones, such as civic pride and the associated euergetism, declined – at least in so far as the civic institutions were concerned. Donations to the Church and charitable works inspired by Christian faith, on the other hand, became more and more common.

From the 4th century onwards migrations, as well as invasions of various tribes, became a new major factor in the Empire's existence. Military reforms of Diocletian and his successors resulted in reorganisation of the army and considerable increase in the number of soldiers (along with the associated taxation necessary to support them). At the same time, the number of foreign soldiers in the ranks of the Roman army, particularly in the West, swelled, and by the time of the eventual collapse of the Roman state in that part of the Mediterranean, the Roman armies there consisted predominantly of federate soldiers of barbarian origin, making the Roman military depend no longer on citizen soldiers but on federate forces. Meanwhile, the situation in the East was characterised by frequent border conflicts with Persia, with occasional major offensives that weakened both states and eventually opened both powers to the conquests by the newly established Arab Caliphate in the 7th century.

General remarks

I have decided not to concentrate much attention on the West, as that part of the Empire has been examined in more detail, as has rightly been pointed out by L. Lavan in his bibliographic essay "Social space in late antiquity"[2] – along with a complaint about the lack of a new synthesis on bathing. This gap was to a considerable extent filled by the work of F. Yegül, who discussed certain aspects of bathing that had not been previously explored, devoted some attention to the Roman East and extended his analysis much further into Late Antiquity than previous works.[3] His book, to a certain extent, addresses issues analysed in this dissertation (such as the transformation of bathing during Late Antiquity), and its publication resulted in some reconsiderations pertaining to the content and focus of this book. Yegül's work opens with a detailed look into bathing activities and presentation of elements that added to create the bathing experience. Subsequently, he analyses the moral issues that appeared in the context of bathing: the use of luxury, nudity, gluttony and equality. He then focused on the origins of Roman bathing, infrastructure and architecture of baths, examined bath-houses in different areas of the Empire and proceeded to look into transformation of bathing during Late Antiquity and beyond. An older, but by no means obsolete, work on bathing during the (primarily) early imperial period was written by the late G. G. Fagan;[4] he made extensive use of Martial's poetry in order to analyse the realities of bathing in early imperial Rome, analysed the increase in popularity of bathing in Roman society from the time of the late Republic onward, pointing out, among other causes, the fact that bath-houses offered a freely accessible, luxurious environment for socialising; he also noted the much more communal than nowadays character of city life in Roman antiquity. He also examined the trends of patronage related to bath-houses, exclusively private until the early imperial period. Fagan also noted the importance of bathing in medicine, drawing attention to texts authored by both medical and non-medical authors (during the early imperial period), and briefly examining the state of medicine of the day in the context of baths.[5] Some of the social and cultural aspects of bathing were also previously discussed in A. Berger's *Das Bad in der Byzantinischen Zeit*, an excellent dissertation examining the general place of bathing in the Eastern Roman Empire and discussing the sources mentioning the subject.[6] A now somewhat out-of-date article by J. DeLaine succinctly summarised the key reasons for which Roman baths played such an important role in society – as well as the reasons why, at the time of the article's publication, studies concerning bathing were relatively scarce.[7]

The sheer wealth of source material relating to certain times, themes and places in Late Antiquity and the relative scarcity of texts dealing with the others make a truly comprehensive approach to baths and bathing in the period, especially within the framework of a single monograph, an impossibility. Much of the available material, however, the vast majority of which

deals with the subject of this book only in passing, has not yet been fully utilised, and it was my intention to, at least partially, address this gap in the scholarly work. The question of bathing in medical works of Late Antiquity has not been previously addressed beyond general remarks, and the exploration of this subject forms a significant part of the third chapter of the present book. Considerably more information can also be, I believe, extracted from religious writings, such as those of the Church Fathers and, to a lesser extent, the lives of saints. Finally, some of the incidental remarks pertaining to ablutionary activities from sources otherwise not concerned with bathing at any length were examined with the thought of enhancing the image emerging from the more focused accounts discussing baths or bathing. Ultimately, the following work is intended to provide not only an overview of the wide range of functions that the baths had in Late Antiquity, along with the remarks on the transformation of the baths and bathing culture, but also an analysis of their place in the popular consciousness of the time, as well as a synthesis of uses that bathing and washing had in the medical science of Late Antiquity.

The relative abundance of sources related to Antioch including, among others, orations of Libanius, John Chrysostom's homilies and, concerning also the later period, the *Chronicle* of John Malalas, is sufficient to make that particular city the subject of a more in-depth examination; I am going to look at it from this perspective throughout the first chapter. It is worth noting that other authors have also recognised the importance of Antioch in analysing the social and city life in Late Antiquity.[8] There are also, of course, numerous remarks on the bathing facilities in Constantinople and, to a lesser extent, in Alexandria. Taken together, references to baths in these three cities constitute, with ease, the majority of the available literary sources on bathing facilities located in specific places of the Eastern Roman Empire. This is hardly surprising if one considers that nearly all of the prominent authors of Late Antiquity whose works survive to this date either lived, or at least spent considerable time, in one (or more) of these major cities. The incidental remarks on baths in other locations of the Empire usually stress their extraordinary character and fame, describing them as either places of miraculous or near-miraculous healing (attributed, most commonly, to natural springs, supernatural forces at work or both) or as unusually beautiful and superbly adorned.

As the technology involved in the running of bath-houses and matters such as the layout of baths are not the main subject of this book, I am going to incorporate only the relevant material related to this area of study. I decided to provide a general overview of these matters (as much as it is necessary to give a general idea of the practical issues that may have had an impact on the everyday use of baths) in the opening of chapter one. For this purpose, I used primary sources such as the works of Vitruvius[9] (ca. 80BC – 25BC) and Frontinus[10] (ca. AD 40–103), due to a general lack of relevant technical manuals on the subject from later centuries dealing with water supply to the baths, and selected secondary literature. An excellent work on the subject of

baths and their workings was written by I. Nielsen,[11] whose attention was focused on technical solutions used in bathing establishments and the water supply of bath-houses, analysing archaeological material as her main source. Considerable attention to the subject was more recently devoted also by F. Yegül.[12]

Chapter 1

The first chapter focuses on analysing the cultural and social importance of bath-houses and bathing within late Roman society, and the changes relating to these areas that occurred during Late Antiquity.

To determine what the baths actually were (their general functions and internal layout; the technical infrastructure; their size) and the place of the bath in a city, town or military camp, and similarities and differences in functions and roles of the baths in these locations, I analysed the more prolific ancient authors (especially those who devoted some of their attention to city infrastructure), such as Vitruvius, and secondary literature on baths in general (archaeology and architecture) and on baths at chosen locations. I also included a brief overview of the arrangements used by Romans in regards to the water supply system. As previously mentioned, I have chosen not to focus much on archaeological findings, as they have, to a considerable extent, already been analysed (by, e.g., I. Nielsen).[13] I did, however, include some of the recent studies, in particular on the system developed for and used in Constantinople.[14] The capital city enjoyed, on the one hand, a uniquely privileged position in the Empire; on the other, it was located in an area that was particularly difficult to supply with water. This makes it an interesting case to study – even if parallels with Constantinopolitan arrangements must, for the same reasons, be made with particular care. By virtue of being the main imperial residence in the East, the needs of the city and its people were given very high priority as far as imperial patronage was concerned. In an age when the threat of usurpation (and, indeed, successful usurpations) was quite common, ensuring loyalty of the city's inhabitants was a necessity for any ruler who hoped to enjoy a long reign, and providing and maintaining the capital's infrastructure were among the most straightforward measures for keeping dissatisfaction of citizenry low.

For the sake of completeness, it is necessary to devote some attention to the construction efforts, maintenance and destruction of bath-houses. By examining these activities I drew some general conclusions regarding the status of baths in Roman society, and ascertained the amount of attention the general state of baths and their maintenance received from the authors of primary sources. In turn, this permitted drawing some conclusions on the extent of their importance for the communities in which these works were taking place. In this context I also examined the evidence concerning the reliance of Roman-style bathing on political stability and, to a lesser degree, on willingness of the emperors and the most influential and wealthy

citizens to build and sponsor public baths, and the infrastructure necessary for their functioning. This is followed by an analysis of the potential symbolic meanings the presence of baths may have had for the communities which were utilising them. An exploration of the role of the bath-houses in the consciousness of Romans themselves as well as foreigners who became aware of this – typically Roman – phenomenon of communal bathing follows. What was an outsider's perception of a bath-house, their reaction to the foreign custom? In what behaviour and actions, if any, did this perception result, and what, in turn, was the Roman reaction to the outsiders' behaviour regarding the baths?

Subsequently I included an overview of the question of nudity in the bathing environment in Roman society and the possibilities it created for – perceived or real – equality among the bathers. This is closely related to the issue of whether men and women bathed together; if so, to what extent this was taking place, and what (if any) the general attitude within Roman society was towards this issue. In turn, this analysis serves as an introduction to a broader overview of baths as meeting places in general. This overview includes an in-depth look at the social functions the baths served and activities they facilitated. In particular, I examined the everyday interactions between the bathers, leisure activities that occurred in bath-houses, and some of the more specific behaviours, such as displays of wealth and social status by the elite, and the ways in which these displays were achieved.

Finally, I examined the evidence pertaining to situations not related to bathing or activities associated with it that did take place in baths. Such situations include, for example, utilising bath-houses for purposes for which they were not designed or for which baths were not well suited. I also looked into certain behaviours that were singled out as unusual, for one reason or another. These included, but are not limited to, examples of bathing outside of the standard bathing facilities and the potential implications thereof. This is followed by an overview of the potential risks of bathing and detrimental effects it might have had on bathers (this particular theme is examined in more detail in chapter three), with a brief overview of some of the more drastic events that took place in bath-houses and an examination of the reactions of the authors of the primary sources to these.

The main primary sources which I used in this chapter include the works of Ammianus Marcellinus (ca. 330 – ca. 391–400), the historians of the Church Sozomen (ca. 400 – ca. 450) and Socrates (ca. 380 – d. after 439), the history of Zosimus (fl. 490s–510s), works of Procopius (ca. 500 – ca. 554), laws, the later chronicles of John Malalas (ca. 491–578), Theophanes the Confessor (ca. 758–817) and the anonymous 7th-century *Easter Chronicle*, as well as the texts of early Church authors, especially John Chrysostom (ca. 349–407). A few of the sources dealing primarily with the West have also been examined (such as the *Letters* of Sidonius Apollinaris – ca. 430–489), as they can be useful in drawing conclusions of a more general nature. Even a brief overview of the extant sources shows that almost invariably the references to bathing

contained in the primary material are incidental. While such circumstances may on some occasions limit the researchers to reliance on anecdotal evidence, supported only by limited archaeological data and forcing them to make extrapolations, it may also be considered an unexpected boon. While a subject of major importance to the author can often be expected to have been covered with an agenda in mind, bath-houses and bathing more often than not serve as a background to other events, and thus their presented appearance can be deemed to be as close to reality as possible (or, at the very least, reality as perceived by the authors). In cases where bath-houses or bathing did become the main focus (at least temporarily), additional care was taken to identify possible biases and distortions.

Taken together, the insights gained from examining the various aspects of bathing and of the attitudes towards bathing allowed me to create a reconstruction of one of the most important institutions in the daily life of Romans in the period of Late Antiquity.

Chapter 2

In the second chapter I investigated issues related to religion and the associated cultural sphere, in the context of bathing customs and attitudes. The study is concerned with Christianity, for the most part, but also Judaism and traditional Roman cults and beliefs. Here I discussed in detail the place of baths in a society that was becoming predominantly Christian, and attempted to answer the question of what changes, if any, the advent of Christianity brought to the bathing culture. I began doing so by examining the guides for Christians discussing acceptable types of behaviour, such as the early Christian *Instructor* (written at the end of the 2nd century) of Clement of Alexandria (ca. 150 – ca. 215). This work provides guidance on everyday life for Christians, often referring to the Scripture as well as a plethora of pagan authors, and the advice offered shows a strong influence of Stoicism.[15] Tertullian's (ca. 155 – ca. 240) apologetic work is another useful source on early Christian attitudes towards the issues of daily life (including bathing), stressing the overall compatibility of Christian teaching and values with the norms of Roman society.[16] I also examined homilies, particularly those by John Chrysostom, to determine whether the early Christian teaching on the subject of bathing changed significantly over time. I subsequently looked into the question of whether there were any specifically Christian attitudes to baths and bathing that were different from non-Christian ones; I also addressed the issue of whether Christianity as whole can be treated as a factor of cultural change in relation to bathing, or whether some specific trends within the religion can be identified as having a particularly strong impact.

Another question I explored is the influence of bath-related terminology on the Christian discourse relating to baptism; to what extent, and in what context, words previously used to described mundane activity came to be

used to denote one of the most important rites of the ascendant religion, and why? I also briefly looked at the Christian interpretation of martyrdom (prior to Christianity attaining the status of a legitimate religion) in situations where it was linked with bathing or bath-houses.

Since baths were commonly associated with healing and medicine, some attention was also devoted to Christian attitudes towards this aspect of bath-houses, in the particular context of miracles and supernatural healing, and a comparison was made with the earlier accounts dealing with this question. Examining this area necessarily meant creating some overlap between chapters two and three; this, however, should allow a more in-depth look at the matter as the question is explored from different angles and perspectives; in this chapter, the focus is primarily on the more general Christian attitudes and ideas. Attention was also devoted to the popular beliefs associated with bathing – beliefs and behaviour that lie beyond the mainstream religious or cultural currents; or, at least, behaviour indicated as such by the authors of the surviving sources.

Subsequently, I examined the extent to which Christian authors associated baths and bathing with wealth and luxury, and whether it affected their attitudes towards the institution itself. It was additionally noted whether such attitudes were new or uniquely Christian or, on the contrary, were a continuation of earlier trends. I also devoted some passing attention to Jewish bathing customs during this period, and to the degree in which they resembled (or differed from) traditional Roman bathing, as well as potential reactions of the representatives of different religious groups to the bathing practices of their respective 'outsiders'.

Among the major sources used in this chapter are the orations and homilies of John Chrysostom, which provide plentiful insights on the everyday behaviour of Christians (at least those living in large cities) and on the attitude of clergy – as opposed to monks and ascetics – towards bathing. As someone who studied under Libanius and received Christian education, the ascetic-turned-priest preached in a manner that earned him the nickname 'Golden Mouth'. More importantly from the perspective of this study, the preserved records of his preaching paint a vivid picture of the life and habits of contemporary Christians. Works of the other great theologians of the age, such as Gregory of Nazianzus (ca. 329–390) or Gregory of Nyssa (ca. 335 – ca. 395), offer similar insights. I also looked into some of the older texts, such as the already mentioned *Instructor* of Clement of Alexandria, the anonymous late 4th-century *Apostolic constitutions*, as well as the canons of the Church.

Chapter 3

The third chapter deals with analysing the hygienic and therapeutic aspects of the baths and is largely based on the writings of medical authors, especially Paul of Aegina. This author's compendium is the most complete summary of medical knowledge of the time; based on the foremost authorities of Late

Antiquity, knowledge preserved in Paul's work is, unavoidably, abridged when compared to the original treatises from which it was drawn. However, it is also a product of the scientific culture of the time, a distilled version of the results of earlier research, assembled in an accessible and easy-to-use manner; I discuss this matter in more detail in the chapter itself.

The overarching theme of this chapter is the analysis of a number of aspects of bathing in the context of the medical profession, primarily the extent and ways in which bath-houses and bathing were employed by medical practitioners and, to a lesser extent, the theoretical underpinnings thereof.

The properties of different types of water and their particular therapeutic benefits, as described by ancient medical writers, are examined first. This is followed by a detailed examination of bathing in the regimen prescribed for healthy people, and remarks on the theoretical underpinnings of such advice. The question of applicability of bathing in general for the sick is discussed next. This allowed me to determine the general interest of the medical profession in the uses of water, and to establish the basic associated concepts.

Subsequently, an extensive overview of the prescribed bathing treatment, according to the type of bathing advised, is discussed. It has to be stated here that this part of the chapter takes a somewhat compendiary form; rather than being a typical historical narrative, it is an extended list aimed at bringing together the most pertinent remarks concerning the use of bathing in medicine. The focus here is, in particular, on the circumstances in which bathing in pure water, in various types of mineral waters and in water with the addition of a wide range of substances, was deemed beneficial to the patients. This is followed by a quick overview of the significance of bath-houses for the medical profession for reasons not directly linked to bathing.

Subsequently, I have taken a more detailed look at a number of sources written by authors who were not professionally involved in medical practice, but who nonetheless mentioned this subject while discussing bath-houses. The very fact that such remarks can be found attests to the widespread (though not necessarily grounded in proper medical knowledge) associations between baths and health. Thus, in the end, the question of knowledge of medicine among non-medical authors is examined – with particular attention to their attitudes to medicine and bathing.

I have devoted some attention to Hippocratic writings, as they constitute a basis for much of the later ancient medical knowledge; by comparing them with later treatises, it is possible to establish – at least to a certain degree – the extent of new research done by physicians and the direction it took. At the same time, it allows one to see how much of the old knowledge was incorporated into the new texts without significant changes, and to examine the general attitude to science in Late Antiquity, with the specific example of medicine. I decided to use Paulus Aeginetas' (Paul of Aegina) medical compendium as the key work that summarises the medical knowledge of Late Antiquity due to its comprehensive nature and time of creation.

The intended result of this monograph is to provide an overview of selected aspects of bathing that have not been previously researched, provide a detailed analysis of the most important episodes and anecdotal evidence from primary sources that are relevant to bathing, a detailed analysis of the impact of Christianity on bathing culture (and of bathing on the forming of Christianity) and an overview of the use of bathing in Late Antique medicine. The latter two subjects in particular involved a considerable amount of original research; re-evaluation and expanding on the existing scholarly texts was the chief aim of the former.

The final conclusions are followed by an appendix consisting of a table listing the bath-houses discussed in the book, listing (if known) their construction date, founder, major renovations and additional information of interest.

General overview of bathing in the Roman world

Before beginning a more detailed and focused inquiry into the Roman bathing customs of Late Antiquity, I feel it necessary to – at least briefly – provide an overview of Roman bathing prior to this time, as well as of the general socio-economic and political situation during the period examined. Such a summary analysis allows me to identify more easily the key changes in the bathing culture and environment and at the same time facilitate the avoidance of excessively extensive interpolations within the principal substance of this book. More importantly, it serves as a summary of the current state of the academic research pertaining to the subject. The secondary literature on Late Antiquity is quite extensive; one could list dozens of only general works. The most notable examples would include Peter Brown's books on the subject, dealing with socio-economic and religious factors and developments of the time;[17] Averil Cameron's works and the volumes of *The Cambridge ancient history* she co-edited;[18] J. H. W. G. Liebeschuetz's works on various aspects of social and city life;[19] Michael Maas's *Age of Justinian* provides a wealth of information on the Empire in the 6th century;[20] a work by J. J. O'Donnell, with the rather telling title *The ruin of the Roman Empire*,[21] is noteworthy for its attempt at re-evaluation of the Late Antiquity by seeking Rome's downfall in its (or rather its elites') attachment to the past and ignoring of current troubles, portraying the Germanic successors of the Roman government as pragmatic realists and painting Justinian as a somewhat deluded and weak monarch. *The fall of Rome and the end of civilization* by B. Ward-Perkins is another work dealing with transformation and change during Late Antiquity, focusing some of its attention on the visible decline in the quality of pottery as an indicator of more sweeping changes.[22]

Focusing on the downfall of Rome is nothing new; the vision of collapsing Rome has been engrained in historiography at least since Edward Gibbon's *magnum opus*,[23] and it is telling that many of the popular histories dealing with Late Antiquity focus on the themes of decline and collapse (even if the exact nature of these causes varies from author to author); one might take

a look at Michael Grant's work in this context, which attributed the fall of Roman rule in the West to numerous disunities and clashes between the Romans and outsiders and (primarily) between the various interest, ethnic and social groups within the Empire itself.[24] This does not, of course, mean that all of the popular histories deal with the themes of fall and disasters; some manage to deal with the matter in a balanced fashion.[25] The tendency to seek (oversimplified) causes of the 'fall' of the Roman Empire (while ignoring its continued existence in the East) had its heartfelt critics as well.[26] It has to be said that while modern scholarship on the subject tends for the most part to focus on transformation and change rather than collapse, it would take wilful ignorance to deny that the standard of living of average Roman citizens during Late Antiquity deteriorated considerably compared to what their ancestors living during the golden age of imperial Rome could enjoy. I hope to demonstrate that an informed and balanced approach to this period, focusing on the socio-cultural, religious and medicinal aspects of bathing, is possible.

Bathing for Romans already prior to Late Antiquity was primarily a social and cultural activity; medicinal and hygienic (in the modern sense of the word) functions of the large, public bath-houses, while also important, could have been (and often were) successfully performed in the humbler establishments, or private homes not fitted with a bath. The true 'Roman' bathing, however, could only take place in a proper (and sufficiently costly, both in construction and upkeep) environment. Some of the estimates put the cost of fuel at two thirds of the total expense necessary for upkeep of the bath-houses;[27] one must however consider that this was not necessarily the case; the amount of water and the technical solutions used in running these institutions greatly varied, and the most conservative estimates put the amount of fuel necessary to provide sufficient hot water for a bather at about two and a half kilograms of wood (the main type of fuel used in bath-houses). Other types of fuel, such as dried dung,[28] were occasionally used as well – one might imagine that this would not apply to the more luxurious establishments, but is perfectly plausible in the case of smaller, particularly rural, bath-houses.

The experience of bathing in 'Roman' style involved spacious, well-heated (with the hypocaust, a system in which hot air was circulated under the floor raised on pillars, and occasionally also through pipes embedded within the walls) and lit rooms, pools with (ideally) constantly flowing water of different temperatures, symbolising wealth and mastery over the natural world, a number of attendants (typically slaves) and, above all, socialising in the company of other bathers. Such baths would frequently be decorated with mosaics, and in the wealthier establishments, also with statues. This was a far cry from the early Roman baths: small, dark spaces designed purely for washing; the considerable development of bath-houses was strongly affected by Greek and, to a lesser extent, Etruscan influences.

Beside the bath-house's permanent staff, the wealthy patrons often also had their own retinues of slaves at their disposal during their trips to the

bath-house, though the extent to which the slaves were present to attend to their master, served only as a display of their master's wealth, acted as bodyguards or were allowed to bathe with their owner cannot be said with certainty. It is known, however, that in some cases the slaves, in general, were allowed to bathe in public baths for free.[29] In the case of the *thermae*, the term commonly used to denote the largest and most luxurious of baths (and in which I employed it), a variety of both physical and intellectual pastimes would also have been available. Providing such conditions, however, required significant financial resources – taken together, the construction, water supply, supply of fuel and costs of maintaining the attendants for the numerous baths could at times be highly draining for the cities' councils, or local benefactors. In Italy (as well as elsewhere) baths can be used to trace the trends in public spending as well as in private benefactions.[30] The sums involved also meant that the baths were used to express the wealth and power of their founders and benefactors.

During the early 4th century some of the bath-houses still resembled, to an extent, the Greek gymnasia of old,[31] and in many ways it is the century during which the Roman bathing establishments reached the zenith of their development, with the last of the grand *thermae* being built in major cities of the Empire. It was not long after that, however, that many of the provincial cities began to struggle to keep their civic infrastructure in working order. Ubiquitous signs of the gradual decline of the decurial class, members of which were tasked with providing funds for their cities as a form of taxation, are a clear indication of an apparent cause of the financial problems of urban communities. With the increasing centralisation and the imperial administration taking over governing of the provinces to a greater and greater extent, the previously prestigious and desirable status of a municipal decurion for many became little more than an unwelcome burden. With the decurions escaping their financial duties (after having already lost much, if not most, of their say in local politics), provincial civic centres lost much of their *raison d'être* – and of funding for its upkeep. Eventually, much of the old civic infrastructure became little more than a source of building material.[32] The extent to which this affected bath-houses is one of the themes explored in this work.

This leads to another major issue I am exploring – how much, if at all, did the attitudes towards bathing change during this time? And what were the factors that contributed to this change, or lack thereof? The task of answering this question is not without significant difficulties. Few of the extant primary sources address the issue directly, and most of those that are relevant in this context were written by the Church Fathers, and are thus, unavoidably, considerably biased in their assumptions and purpose. They are, however, a very good representation of what the preachers considered to be desirable behaviour, and contain examples of undesirable behaviour – often exaggerated, but nonetheless reflecting at least to an extent the actual behaviour of the Christian listeners.

Notes

1 E. g. J. H. W. G. Liebeschuetz, "The end of the ancient city", in: J. Rich (ed.), *The city in late antiquity*, London 1992, pp. 6ff, 12ff.
2 L. Lavan, "Social space in late antiquity", in: L. Lavan, E. Swift, T. Putzeys (eds.), *Objects in context, objects in use: material spatiality in late antiquity*, Leiden, Boston, MA 2008, pp. 129–157.
3 F. Yegül, *Bathing in the Roman world*, Cambridge 2009.
4 G. G. Fagan, *Bathing in public in the Roman world*, Ann Arbor, MI 1999.
5 G. G. Fagan, *Bathing in public . . .*, p. 109.
6 A. Berger, *Das Bad in Der Byzantinischen Zeit*, Munich 1983.
7 J. DeLaine, "Recent research on Roman baths", *Journal of Roman Archaeology*, vol. 1, 1988, p. 11.
8 For example I. Sandwell, *Religious identity in Late Antiquity. Greeks, Jews and Christians in Antioch*, Cambridge 2007 or D. S. Wallace-Hadrill, *Christian Antioch. A study of the early Christian thought in the East*, Cambridge 1982.
9 Vitruvius Pollio, *The ten books on architecture*, M. H. Morgan (ed.), London 1914.
10 For the purpose of this work I have used a translation of Frontinus' *De aquae urbis Romae* from the book of H. B. Evans, *Water distribution in Ancient Rome. The evidence of Frontinus*, Ann Arbor, MI 1997.
11 I. Nielsen, *Thermae et balnea. The architecture and cultural history of Roman public baths*, Aarhus 1990.
12 F. Yegül, *Bathing in the Roman world*, pp. 101–198.
13 I. Nielsen, *Thermae et balnea*.
14 J. Crow, J. Bardill, R. Bayliss, *The water supply of Byzantine Constantinople*, London 2008.
15 Clement of Alexandria, *Christ the educator*, S. P. Wood (ed.), New York 1954, p. xvii.
16 E. Osborn, *Tertullian, first theologian of the West*, Cambridge 2003, p. 83ff. A work by T. D. Barnes, *Tertullian. A historical and literary study*, Oxford 1971 is another useful study of the theologian's life and work.
17 P. Brown, *The world of late antiquity*, London 1971; *idem*, *The making of late antiquity*, Cambridge, MA 1978.
18 A. Cameron, *The Mediterranean world in Late Antiquity AD 395–600*, London 1993; *idem* et al. (eds.), *The Cambridge ancient history*, vols. 12–14, Cambridge 1997ff.
19 J. H. W. G. Liebeschuetz, *Decline and fall of the Roman city*, Oxford 2001.
20 M. Maas (ed.), *The Cambridge companion to the age of Justinian*, Cambridge 2005.
21 J. J. O'Donnell, *The ruin of the Roman Empire*, London 2009. While definitely an interesting read and one containing insightful observations, the work unfortunately did not manage to avoid some blatant moralising.
22 B. Ward-Perkins, *The fall of Rome and the end of civilization*, Oxford 2005.
23 E. Gibbon, *The history of the decline and fall of the Roman Empire*, London 1776–1789.
24 M. Grant, *The fall of the Roman Empire*, London 2005 (first published in 1976).
25 E.g. the somewhat flowery J. J. Norwich's *Byzantium: the early centuries*, London 1988.
26 J. W. Barker, *Justinian and the later Roman Empire*, Madison, Milwaukee, London 1966.
27 P. N. Blyth, "The consumption and cost of fuel in hypocaust baths", in: in: J. DeLaine, D. E. Johnston (eds.), *Roman baths and bathing. Proceedings*

of the First International Conference on Roman Baths held at Bath, England, 30 March – 4 April 1992. Part 1: *Bathing and society*, Portsmouth, RI 1999, pp. 89–98.

28 John Chrysostom, *In Matthaeum (homiliae 1–90)*, 63, 4, MPG 57. The passage focuses on the worthlessness of gold (in and of itself) – while even dung has its uses!

29 G. G. Fagan, "Interpreting the evidence: Did slaves bathe at the baths?", in: *Roman baths and bathing*, pp. 29–30.

30 J. DeLaine, "Benefactions and urban renewal: bath buildings in Roman Italy", in: *Roman baths and bathing* . . ., p. 67.

31 Inge Nielsen distinguishes between the Greek and the Roman style of baths by asserting that the Roman baths made use of the hypocaust, and included either a *sudatorium* or *caldarium* (hot steam room or a hot water pool). I. Nielsen, "Early provincial baths and their relations to early Italic baths", in: *Roman baths and bathing* . . ., p. 39.

32 E. g. J. H. W. G. Liebeschuetz, *Decline and fall* . . ., pp. 30, 39, 61, 99 et al.

1 Baths and Roman society

This chapter begins with an overview of the conditions necessary for the Roman style of bathing and of Roman bathing culture in general. After examining the bathing-related infrastructure and its sources of funding, exploration of the symbolic value of bathing establishments follows, to help determine the importance attached to bath-houses in Roman society and the perceptions of Roman baths and bathing customs in the eyes of those who, from the Roman perspective, were the 'others', foreigners. This is followed by a detailed look into the questions of nakedness in Roman bath-houses and of men and women sharing the bathing space. This analysis leads into the examination of a broader question of bath-houses as social spaces, with particular emphasis on the role of bath-houses as places associated with wealth and luxury. Subsequently, I examine the attempts of replicating at least some of the functions of bath-houses when adequate amenities were not available. Afterwards, I discuss the accounts of deaths and misfortunes that occurred in bath-houses, to further explore the associations linked with bath-houses. Finally, a brief look at unusual uses of bath-houses precedes a summary and conclusions to this chapter.

Importance of infrastructure: water supply, its maintenance

The numerous Roman bath-houses would have been useless if not for sufficient water supply; this subject, therefore, deserves at least cursory attention. The development of bath-houses was dependent on the abundance of available water, but also spurred the development of water-related infrastructure. The delivery of water by aqueducts, like many other systems and institutions, was often modelled throughout the Roman Empire on the *urbs*. Depending on their wealth or sponsorship, other cities would build their own aqueducts, or receive at least part of the necessary funds from the emperor; in the absence of these, many places relied on cisterns for storing water (eventually, Constantinople itself became reliant on its extensive system of both open-air and underground cisterns).[1] In the East, the title of the largest and most notable aqueduct would likely have to go to the structure completed by Valens, which supplied Constantinople until its devastation by Avars in 626.[2] The

capital city was the main beneficiary of imperial patronage, and was followed in this respect in the East by Alexandria and Antioch. The most well-known Constantinopolitan aqueduct was completed after decades of building works and was a whole complex system in itself; it dwarfed the old aqueduct built by Hadrian. The new capital's water system introduced – on an unusually vast scale – a system of open-air reservoirs and cisterns,[3] which were being added over the course of centuries, ensuring huge reserves of water for the city for any eventuality.

The two textual sources that are most often mentioned in the context of Roman aqueducts and water supply are the works of Sextus Julius Frontinus,[4] who in AD 95 was appointed *curator aquarium*, overseer of Rome's aqueducts, and of Marcus Vitruvius Pollio,[5] an architect and engineer. While Vitruvius' work is, in fact, a building manual and provides technical details on how to construct practically every type of building or machine used by Romans in his time, Frontinus is mainly concerned with Rome's aqueduct system; he also includes lavish praise of Nerva (96–98), the ruling emperor, and often mentioned Emperor Octavian's (27 BC – AD 14) associate Marcus Agrippa (63–12 BC), who greatly improved Rome's water supply. He omits, however, most of technical details of building and maintaining it. His treatise gives information about the date of construction and capacity of Rome's aqueducts, the importance of their maintenance, and sizes of pipes used for transporting water from main lines, and quotes laws which impose fines on offenders who would pollute water intended for public use, or damage or endanger water lines in any way. Frontinus also elaborates on the distribution of the water delivered to Rome; how it is divided for general public use, for use "in the name of the emperor" and for private users.[6] It should be noted here that the water delivered *in nomine caesaris* was not only used by the court, but it was also (if not mainly) delivered to various facilities (like baths) as an imperial gift for the people.[7] In fact, Vitruvius[8] mentioned a way to divide the water tanks into three parts, so that private users would receive water only if public and imperial needs for water were satisfied. This arrangement, however, has not been attested archaeologically – at least in North Africa.[9] If that were the case for other regions of the Empire as well, it would mean that Vitruvius' suggestion of improving water distribution was never really implemented beyond Rome itself. This would mean that these treatises cannot be used to determine the solutions used in the majority of the Empire, and that our most readily accessible accounts dealing with water-related engineering in the Roman world can only be applied to Rome itself – and are most likely only relevant for the early imperial period, forcing any researcher to extrapolate from them with great care indeed. On the other hand, despite these reservations, the aforementioned sources do remain our most important literary accounts dealing with the matter.

The amount of delivered water was measured in *quinaria*, which is a name for the size of pipe;[10] such a system of measuring water delivery suggests that the water was flowing constantly. Although the flow of water depends on

pressure as well as on a pipe's diameter, Frontinus' work might suggest that there was some effort put into ensuring that every *quinaria* provided a similar volume of water and that private users did not receive more water than they were entitled to; this required using officially stamped pipes of proper diameter over the distance of at least 50 feet from the place where they would be joining main water lines to maintain roughly the same water pressure in them.[11] Other causes of problems with water pressure were dishonest watermen who were selling the access to water for their own profit, and illegal tapping of water conduits by private persons.[12] It should be noted that there is no actual material evidence that the pipes were attached to the water tanks in the way Frontinus described.[13] Perhaps it was just another worthwhile idea that was never introduced in practice, or was introduced only temporarily and on a small scale – or, as the case may be, no relevant material survived to be examined by archaeologists.

The constant flow of water (which sometimes meant that this resource was simply wasted) caused some discussion about the extent to which the aqueducts were a real necessity and to which they served to provide luxury and visible proof of the greatness of the Empire which could provide it for its citizens.[14] Apparently, in Rome itself there was little need to save water, except perhaps for the time of day when the demand for it was the highest; in other areas of the Empire an aqueduct could ensure that the population would have a supply of fresh drinking water even during all but the worst droughts.[15] The surplus water could also be stored in cisterns, both public and private, especially when there was not enough rain to fill them. Simple water taps have also been found in many ancient houses that had running water,[16] and these were either used at the distribution boxes, from which water could be directed to various places in the house, or at the end of the line; in most cases the water was flowing into a basin in an atrium.

The cost of building aqueducts was very high, and the problems with keeping the water flowing after the construction ended were numerous as well. These included costly maintenance, changes in the amount of water available at the source, unstable land on which an aqueduct was built (this was the case with Rome's Aqua Claudia, which was not used during nine of the first fifteen years after its completion, due to necessary repairs) and the fact that they could be cut during a siege or even used as a way into the city by enemies.[17] In Rome itself, the aqueducts were either funded from spoils of war, by the patronage of wealthy citizens or by the emperor.[18] On the other hand, some of the greatest aqueducts were built in provinces; examples include the Pont du Gard, which transported water to Nemausus (modern Nîmes) and reached 49 metres in height, the Segovian aqueduct in Spain dating from Claudius' times, which is still working, or the 100 kilometre-long aqueduct which supplied water to Carthage; they were all impressive examples of Rome's power.[19] As a side note, P. J. Aicher discusses the idea that the private users in Rome did not have to pay for the water as was the norm in other Roman cities, as it was granted to the people by the emperor;

he is unconvinced by the idea – while any private person who wanted to access the water line had to first gain permission from the emperor, this did not automatically mean that the granted access was free.[20] We might never have a definite answer to this question; on the one hand, those who would want such access to water could almost certainly afford to pay for it anyway, making such imperial patronage somewhat superfluous (and limited to individuals); on the other, imperial gifts such as this may well have been granted as a sign of favour – and to ensure, or at least strengthen, the loyalty of the beneficiaries.

Construction of an aqueduct would begin with finding an appropriate source of good-quality water (springs, a number of wells or a river); then the engineer would have to set a course for the aqueduct that would ensure the steady flow of water; conduits (made of masonry, lead or terracotta pipes) had to run either underground, on substructures (walls, up to 2 metres in height) or arcades, if the substructure was to be higher than 2 metres. In some cases, when arcades were too costly or too difficult to build, an inverted siphon could be used. Along the way settling tanks could be built; these allowed the water to be cleaned of sand and other impurities. Some of the water could be used outside of the town it was intended for; the rest would be stored in a *castellum*, a large water tank, from which it would be further distributed.[21]

As the existence of typical Roman baths depended on the availability of water, quite often the number of baths, both public and private, would increase after a town obtained a stable water supply.[22] A. T. Hodge stated that the aqueducts were constructed mainly to supply water to the baths.[23] In terms of what the aqueduct water was mainly used for, this is clearly the case. Early baths (Greek and early Roman baths) consisted of a number of bath-tubs in which hot water was poured over the bathers by the attendants.[24] Separate bath-tubs were not only a result of moral restrictions but, perhaps more importantly, of insufficient water supply, inadequate for creating large pools, which require an incessant flow of water to maintain at least a degree of cleanliness. Without an aqueduct (or a nearby river and a system of pipes), the water for baths had to be taken from wells or carried in barrels or buckets; such an arrangement did not allow for maintaining large pools, even if there was much effort put into constructing and maintaining pumps and treadmills to power them, as the evidence from the Stabian baths in Pompeii shows.[25] After the political and military disturbances of the 4th and 5th centuries in the West significantly disrupted the workings of some of the aqueducts, baths in many cities were either rearranged (for example, large pools disappeared completely and separate bath-tubs were again introduced) or even closed down altogether. The maintenance of aqueducts was a major issue, and laws reflecting this were quite numerous. They both regulated matters of cleaning and maintaining of the structures themselves,[26] and specified the purposes for which the water could be used (for example, private recipients could obtain individual water supply as a privilege), and in what quantities.[27] Generally,

the burden of maintaining the aqueducts in working condition fell on the owners of the land through which the system was passing (they were exempt from other taxation), and on the city officials. Without sufficiently strong central power to enforce these laws, the infrastructure would eventually become neglected, and the amount of available water would become insufficient. Without the continuous flow of water, the bath-house pools would quickly become unusable, and the alternative system of bathing, that of a series of individual bath-tubs, would reappear, somewhat similar to ancient Greek public baths; this occurred when – because of either lack of funding[28] or enemy attacks – the supply of fresh water was insufficient to maintain the traditional way of bathing. For centuries the type of baths present in an area was a clear indicator of its wealth and security, and of Romanisation in general: the sophistication of the installation could be used as an indicator both of the wealth of the founder as well as of the degree in which the typically Roman models were being used. During Late Antiquity, however, the cities and areas which could previously boast the technologically advanced and well-decorated bath-houses often had to downgrade their infrastructure, for the already mentioned reasons. The forms that were replacing them evolved and, in the long run, took the mediaeval, 'Byzantine' form and became the predecessors to the Turkish *hamams*. As with any gradual process, it would be difficult to pinpoint a particular development that would justify a sudden shift in terminology (such as from 'Roman' to 'Byzantine'), and it is no different with bath-houses. However, of the two technical arrangements which I would deem the most important in, and the most characteristic for, a Roman bath-house, that is, the constantly flowing water and the hypocaust (underfloor, and occasionally also inter-wall heating) system, only the heating survived quite well into the Byzantine period. It could therefore be justified to view bath-houses with flowing water as the most 'Roman', and lack thereof as something that distinguished the later 'Byzantine' bathing establishments. Nonetheless, making such distinctions seems to me to be rather artificial and non-productive; it would perhaps be better to argue that the characteristics of a 'Roman' bath-house changed over time, primarily due to economic factors (discussed in the introduction); unable to utilise all of the comforts and solutions available to their predecessors in earlier times, the late antique Romans had to make do with what was available.

The baths' water tanks, where they existed, were usually placed on the roof, and the water from aqueducts, where available, was delivered directly into those, usually from large water tanks in the city. In some cases a bath would use a mixed system of water delivery; in Herculaneum, the aqueduct supplied water to the *frigidarium*, while wells were used to supply the rest of the baths.[29] Water from an aqueduct meant that there was a constant flow of clean water, which was necessary for maintaining at least some hygiene in larger pools, but at the same time it meant that the drainage system had to be highly effective. The drains could either run under the floor, or the water could first wash the floor and then go into the drain (the solution

usually found in *caldaria*). Water from *frigidaria* was typically used for flushing toilets.

During Late Antiquity, there was a significant decline in the extent of private euergetism: the cities had to rely more and more on imperial benefactions. N. Zajac noted that providing various public buildings (among which the baths were most prominent) for the people served as a way of expressing the personal legitimation of the emperor's rule.[30] The baths were also, as was already noted many years ago, a way of expressing power over the natural environment (primarily water).[31] Even this imperial munificence, however, had its limits: in a memorable passage, Ammianus writes that during the Emperor's stay in Rome, Constantius (337–361) was awed by the city's architecture; among the notable buildings the Emperor admired bath-houses built in provincial styles, "*lavacra in modum provinciarum exstructa*".[32] C. Edwards clarified that Ammianus was referring to the size of the baths, which brought to mind the size of whole provinces, rather than the style in which they were built.[33] Judging from the context, this reading is quite plausible, as Ammianus' description of Rome's buildings is primarily focused on their size (Constantius was overwhelmed by the scale of the works that were undertaken by previous emperors and abandoned thoughts of surpassing them). This could, perhaps, be treated as an indication of the limited resources of the Empire – or the diminishing importance of Rome, no longer the Empire's centre of power. Indeed, there is very little evidence of any new construction works in Rome from the 4th century onwards – although many of the existing structures did undergo renovations between the 4th and 6th centuries (including the baths of Agrippa, Caracalla, Diocletian, as well as those of the Severian palace and Sessorianum). The *thermae Constantinianae*, built by Constantine sometime prior to 315, had to wait for thirty years for renovation after their destruction by the Goths in 410.[34]

A particular way of showing imperial power was recorded by Socrates Scholasticus, a 5th-century Church historian, who made a note of a building initiative of Valens (the one who completed Constantinople's aqueduct), notable for its unusual character: after Procopius (the historian's earlier namesake) attempted to seize the throne (365–366), the Emperor demolished the city walls of Chalcedon as a punishment for supporting the usurper, and used the thus obtained material for building a public bath in Constantinople (the historian noted the walls were subsequently repaired with inferior stone).[35] Socrates quoted a prophecy that was supposedly found on one of the stones from Chalcedon that predicted their removal and reuse in construction of a bath-house, as well as future barbarian raids on Roman territory that were to begin after Constantinople was supplied with an abundance of water. For this, Socrates provides two possible interpretations: the supposed prophecy was fulfilled either by the construction of the aqueduct of Valens, or by the construction of the baths that used water from the said aqueduct, by the prefect Clearchus (who held the office in 372–373, and subsequently in 382–384), and were called "Plentiful water" – δαψιλής ὕδωρ – *dapsiles hydor*. Reusing

of an old building was not, in itself, rare: in Ephesus, for example, the old civic centre was left beyond the new fortifications, and the materials from the prytaneion (the term most commonly referred to the seat of the executive in a Greek city) and other structures from the area were used to rebuild and adorn the new centre, including the Baths of Scholastica (renamed after the lady who sponsored the rebuilding).[36] This is a good example of the breakdown of the old civic organisation of the city – and of how at least some of the previously valued comforts remained in many cases the same as before.

Theophanes the Confessor (ca. 759–817/18), a monk and chronicler who compiled for his purposes many of the earlier authors during 810–815, similarly to Socrates mentions that the "impious Valens" (as the author characterised him) built an aqueduct which the Emperor named after himself;[37] although the aqueduct existed even before Constantine I's (306–337) reign, it was Valens who started to expand it, but Theophanes does not mention earlier works; it is typical that only the last emperor responsible for work on, and completion of, a major project is given credit for the entire enterprise, even when the chronicler was critical of the ruler's religious views. This is also another good example of the tendency to seek fame and lasting memory by the founders, contributors and restorers, preserved in the names of public utility buildings. Assuming that Valens did indeed consider naming the aqueduct as means of preserving his memory, one might add that at least in this case the method proved quite successful. What is perhaps the most important about this account is the fact that the ancient historians and chroniclers recognised the importance of such major undertakings. Such construction efforts not only provided direct benefits to the local communities, but in addition provided a clear example of Roman superiority over surrounding nations, and the mastery of Romans over nature. It is worth noting that the purposes for which major public works were undertaken were occasionally conflicting; at least this seems to be the case in a particular passage from Procopius. He included a much less flattering account of Justinian's passion for building than the one found in the panegyrical *Buildings* in the *Secret history*,[38] also known as *Anecdota*, a source best characterised as invective (*psogos*). The ancient author reports that Constantinople's aqueduct (that of Valens) was already in a very poor state during Justinian's (527–565) reign and delivered only a fraction of the water it should have; despite that, Justinian did not allow money to be spent on repairing it, but instead became engaged in construction of many other buildings, by the sea and in the suburbs, that did not (in Procopius' opinion) serve any useful function; because of this, there was a shortage of drinking water, and the baths were all closed down.[39] This information becomes all the more interesting when put together with a passage from Theophanes, who mentions the drought that plagued Constantinople in 562: he writes that the dominant northern winds caused the drought in November, when the scarcity of water led to fights at the fountains; the following August, Theophanes reports, there was another water shortage, and this time he mentions that the baths were closed

and that people were killed near the fountains (presumably, when they were fighting for water); interestingly enough, the closure of baths is not mentioned when the first drought is reported, possibly indicating that despite the shortage of water, the running of baths was considered sufficiently important to keep using up the precious resource.[40] It would however be unwise to draw any definite conclusions from this lack of information. It is impossible to determine whether the description of drought is simply repeated, or if the first account of it should be treated separately from the second; if that was the case, it could, after all, mean that at least some of the bath-houses remained operational even when the supply of water from the aqueduct (which also provided water to the fountains) was running low. In any case, these events are likely to have been those referred to in the *Secret history*;[41] if so, the date of Procopius' death would have to be placed sometime after AD 563 (at least about a decade later than usually assumed) and could also mean that the prefect of Constantinople named Procopius, who was dismissed from the function in April 563,[42] was, in fact, the author of *Secret history*; this would then explain the bitter remarks about the "useless" buildings being built while the city suffered from drought (and perhaps also the neutral tone of the passage concerning this prefect, as almost every other official appointed by Justinian was described unfavourably). The question of the prefect's identity is a fairly important one in determining the degree of possible bias in Procopius' account; this, in turn, is significant in establishing the usefulness of one of the few surviving passages from this period that directly and in some detail refer to the functioning of urban infrastructure. The context for the prefect's dismissal in the *Chronographia* strongly suggests it was due to his inability to cope with the lack of water. If Procopius was indeed forbidden to spend money on repairs and restore the aqueduct's capacity, the unjust nature of the loss of his function would be evident and could, perhaps, even explain the reason (or one of the reasons) behind the writing of the invective. A. Cameron, however, rejects this possibility. According to her, John of Nikiu's identification of the prefect Procopius (known from Theophanes) of 562 with the historian is most likely erroneous. She argues that if the *Secret history* was indeed written around the 550s, then from 554 onwards there would have been no other work written by Procopius; and since the vituperative work looks unfinished, perhaps Procopius died in or right after 554? She further argues that if both *Buildings* and *Secret history* had been written around the 560s, then that would have been in stark contrast to the way the *Wars* were written: from a longer perspective, and without being strongly associated with the current events.[43] *Secret history* claims to be a commentary to *Wars*[44] (and therefore it would make sense for it to have been written around the same time), and scathing criticism of Belisarius (ca. 505–565) and Theodora (ca. 500–548) written many years after their deaths does not seem likely, either.[45] Thus, linking Procopius the author and Procopius the prefect would require assuming either considerable chronological discrepancies in the primary sources (which is not entirely

impossible), or a considerable delay with writing *Anecdota* by Procopius after he completed *Wars* (or, perhaps, a very long time of its writing).

Regardless of whom the prefect Procopius might have been, and despite the fact that the information contained in both of the sources discussed here should be treated with significant caution, the texts do assert the reliance of the public bath-houses on the continuous supply of water. This is discussed in some detail in the work of C. Gates, who linked the disappearance of bathing culture in the West with the faltering water infrastructure.[46] This process was but one aspect of the general economic decline, which itself was quite complex and proceeded at an uneven pace. There are examples of slow degeneration even from the 3rd century, but it did not affect everyone equally, and there are examples of, at least small-scale, construction works (a bath-house, in this case) even in areas (like southern Etruria) that were generally becoming impoverished; still, T. W. Potter also mentioned that at the beginning of the 5th century a large bath-house that was in use until that point was demolished, and replaced by what was most likely a villa; there is no mention of any conspicuous traces that would indicate the continued use of part of the old facility, or creation of a smaller bathing establishment.[47] The gradual impoverishment of agrarian communities and cities[48] was visible in all aspects of communal life, and necessarily affected costly-to-run establishments, such as bath-houses. Nevertheless, there is some evidence from 5th-century Gaul showing that, while there are definite examples of crisis, at least some of the landowners were able to retain relatively luxurious lifestyles.[49] The *Letters* of Sidonius Apollinaris provide much insight into this matter, and some of them are discussed below. As for the East, the literary sources provide less information on the decline of the water infrastructure in this period – the anecdotal evidence from Procopius, while intriguing, is not representative, and the generally better economic situation of the Eastern part of the Empire in this period combined with few signs of material decay suggest that the water infrastructure continued to supply the cities without significant problems. It was only in the 7th century, as Liebeschuetz – discussing the case of Anatolia – noted, that while gymnasia went out of use, and even some of the aqueducts were abandoned, the bath-houses survived, and in some cases were newly built as well. It is also in this time that the civic structures became neglected, as the need for defences consumed available resources; the old public buildings in some cases became the source of material for walls.[50]

For a long time the Byzantine aqueducts have not been studied systematically; the situation has been at least partially improved by the more recent studies, such as the already mentioned project examining the water supply system of Constantinople,[51] or the recent volume on Constantinople itself published in Poland (which deals to a certain extent with the subject of the city's water supply).[52] While in certain areas of the former Empire only a few of the aqueducts built in Late Antiquity survived the Dark Ages, and the old water supply was mostly replaced by tanks, cisterns and wells, in others the infrastructure was preserved and maintained with care. The city of Rome

itself benefited from major public works undertaken by some of the popes. While the city's civil administration still performed maintenance until the 8th century, papal involvement was not uncommon. In particular, Honorius I was responsible for constructing a mill on Janiculum that was supplied by water from Aqua Traiana, and Gregory II restored the water to baths located by San Lorenzo fuori le Mura.[53] From a letter by Gregory I, we know that over the course of the 6th century many of the aqueducts that were destroyed by Vitigis in 527 were restored (although they did require further repairs).[54] Provision of water for the city was necessary for baptisteries, mills and baths for pilgrims, making its supply a crucial matter. The public works expenses on the part of some of the popes indicate their role as leading figures of the city. The number of establishments, both public and private, provided with water steadily increased throughout antiquity – and the trend did not change during Late Antiquity.[55] To these, Church amenities were added as well, including baptisteries and bath-houses. Notably, an imperial visit of Constans II (641–668) to Rome in 663 recorded in the biography of Pope Vitalian (657–672) mentions the Emperor's visit to the baths at the Basilica of Vigilius at Lateran.[56] Nonetheless, R. Coates-Stephens points to the cutting of the aqueducts during the Gothic Wars as a possible reason for the end of the operation of the great bath-houses in Rome during the 6th century (he also considers the possibility that the baths went out of use prior to that). It is also possible that due to the drop in Rome's population and presumed reduction of the water consumption in bath-houses, the actual water supply *per capita* was, after partial restoration work on the aqueducts after 527, at a record high.[57] Finally, the evidence of restoration work during Late Antiquity and the early mediaeval period indicates that the specialised technological knowledge necessary for complex engineering was still being preserved.[58] It may be noted here that R. Coates-Stephens does not consider in the cited article the possibility that a skilled workforce may have been drawn from outside of Rome (e.g. from the Eastern Empire). One good example of the water infrastructure surviving throughout Late Antiquity can be seen in Thessalonica, which retained its aqueducts and water tanks; few cities were as fortunate. The author also noted that a lot has been written about the changed significance of baths in the Byzantine cities after the Dark Ages. Some were leased to those who were running them; others were owned by monasteries (and likewise rented out by them). Old Roman baths in Thessalonica, after some modifications, were again in use during middle Byzantine times; we have no information about their water supply, however.[59]

While mostly examining a period later than that on which my study is primarily focused, A. P. Kazhdan and A. W. Epstein's work provides further support for some of the observations being made here. They note that during the 7th century, cities underwent a major transition from the ancient to the mediaeval way of life – though with a reservation that the 7th century is only a "crude demarcation".[60] They further note that luxurious, communal bathing disappeared completely in the 8th century, and remained a privilege

of some of the emperors. Some revival of bathing took place only during the 12th century – but looking into it would be far beyond the scope of this work. The authors do note that while the communal aspect of bathing was gone, bathing itself remained a part of medical treatment, and was still practised for hygiene, though for example monks bathed rarely, the most common rule dictating to do so once a month.[61]

The relationship between bathing and water supply becomes especially visible when the functioning of the infrastructure became disrupted. Relating the siege of Aquileia (of 361), the historian Ammianus Marcellinus informs us that the city's aqueducts were cut and, subsequently, the river's flow was changed, to deny the besieged drinking water – but the city managed to sustain itself on water from wells.[62] This was in no way unusual: the examples of Rome and Pompeii show that most aqueduct water was used for the purpose of bathing, whether in public or private baths;[63] of course, the use of aqueduct water for drinking had priority, and the baths were the first (at least in theory), after private homes, to lose their supply in the case of a crisis, but in general, the cities were rarely reliant on aqueducts when it came to water consumption.

The breaking of aqueducts commonly accompanied sieges; it was usually done in an attempt to force the besieged city to surrender due to the lack of sufficient supply of drinking water – Aquileia is just one example of this. While cities often had an alternative water supply (such as wells), the aqueduct water was used for drinking due to its generally better quality; most of it, however, was typically used to supply the baths. The lack, or significant reduction, of freely flowing water was enough to cause the closure of at least some of the public baths. The most explicit example is provided by Procopius, who, while relating the siege of Rome by the Goths, specifically states that the Romans were unable to use their baths due to their reliance on aqueduct water.[64] We also learn that the Goths later attempted to use the damaged Aqua Virgo aqueduct to infiltrate the city, but were thwarted by the masonry put in the passage on Belisarius' orders.[65] The attackers realised they had been spotted, and abandoned plans for using the aqueducts for attack. Belisarius' far-sightedness in blocking the passage has a very simple explanation: only months before, he used exactly the same tactics as the Goths tried to use to capture Naples (536 AD); he ordered the city's aqueducts to be cut after an unsuccessful assault and, informed by one of his soldiers of the possibility, had the tunnel widened enough for a group of his men to infiltrate the city.[66] In the case of Rome, the aqueducts were necessary for supplying not only water to the baths, but also power for the grain mills; Belisarius devised a makeshift water wheel to power the machinery to deal with that problem.[67]

Yet another siege in which the city's water supply played an important role took place at Auximus in 538.[68] The initial plan to damage the city's water cistern failed due to the quality of the structure, as the soldiers who managed to get inside it were not able to break the masonry.[69] Consequently, Belisarius ordered his men to poison the water in the cistern with corpses, herbs and

lime. The Goths still managed to survive on the (not fully sufficient) water from the city's wells. Auximus eventually surrendered due to famine.

Other examples of breaking the aqueducts by attackers include Gelimer's attempt at recapturing Carthage[70] and the (successful) Byzantine siege of Petra.[71] In the case of Petra, the aqueduct consisted of three separate pipes, the first of which was immediately cut by the Romans; the second one, hidden under the first, was found thanks to the information provided by an enemy soldier – but the third one, hidden under the other two, actually provided water for the besieged until the city fell. This clever arrangement Procopius attributes to Chosroes himself; it was clearly something unusual.

While in most of the cases mentioned above we do not have a direct reference to baths, and in some of them it is clear the besieged (Auximus, Petra) did not use the Roman-style baths, they yet again illustrate the tendency of attackers to disrupt the defenders' water supply in order to obtain their surrender. While this tactic usually did not have the desired effect, it did disrupt all of the non-essential activities that required significant amounts of water – first and foremost, bathing.

Deliberate destruction of aqueducts was not always a wartime event. Listing Theodosius II's activity in Antioch, Malalas states that the Emperor demolished an old aqueduct attributed by the chronicler to Julius Caesar (E. Chilmead's 1691 Oxford edition of Malalas' *Chronographia* wrongly "corrects" this to "Julianus Caesar"),[72] which supplied the acropolis (and the bath he built there) with water. The passage describes Theodosius' efforts to enclose the entire city with new walls, as it had grown far beyond the old ones.[73]

Wars and imperial edicts were not the only cause of destruction of infrastructure; natural disasters took their toll both on a greater scale, and with greater frequency. The presence of functioning bath-houses itself, while highly desirable, contributed to the destructive effects of earthquakes as well. Sozomen highlighted this risk associated with bath-houses when he described the earthquake that destroyed Nicomedia (24 August 358) and prevented the Church council that was planned to take place there.[74] The earthquake caused a great conflagration in the city; the fire originated from the braziers and furnaces (of baths and from those used by the craftsmen); additionally, the previously prepared fuel was often covered with oil, which added to the intensity of the flames. The narrative here is quite lively, and the details, such as how the fires started, are likely to have been taken either from the popular memory and the still circulating tales of the calamity – or from the testimonies of survivors of other great fires. This earthquake is also reported by Ammianus Marcellinus, but there is no mention in his work of how the fires originated.[75] While firestorms started by earthquakes were (and still are) common, it is important to note that the bath-houses only increased this threat. Socrates makes a mention of the destruction of the old baths of Achilles during the fire in Constantinople in 432 (although he does not mention how much, or if, the baths themselves added to the intensity

of the disaster).[76] The baths were promptly rebuilt and re-opened on 11th January 433.[77]

Man-made fires were another risk to the city's infrastructure: Procopius, recounting the events that occurred during the Nika Riot (532), mentions the destruction of Hagia Sophia, the baths of Zeuxippus, part of the imperial complex, colonnades and numerous private houses.[78] Later accounts mention these and other buildings being destroyed: Malalas listed the destruction of the praetorium, the Chalke, part of the public colonnade up to the Zeuxippon, the Great Church, part of the hippodrome and other, unspecified, buildings; the fires took place over several days. Malalas mentions in the description of the aftermath of the riot that Justinian proceeded to construct granaries and reservoirs near the palace, as a precaution for the future (in addition to rebuilding what was destroyed).[79] Theophanes' account of the Nika Riot also includes a list of buildings burnt down by the rioters; among those he recounts are the baths of Alexander, and also the hospice of Sampson, where many of the patients died because of the fire.[80] The *Easter Chronicle* lists the destroyed buildings as well: the baths of Alexander (part of the hospice of Euboulos),[81] the hospice of Sampson and two other buildings omitted by Theophanes – the hospice of Euboulos itself and the church of the Holy Peace – Hagia Eirene;[82] M. Jeffreys noted that the *Easter Chronicle* presented an abridged version of these events, omitting two and a half days of the riot and the mention of some of the buildings from the list.[83] As it could be expected, the primary focus of the authors is on relating the destruction of public buildings, although the destruction of large areas of private housing is also mentioned; the main criterion seems to be the size of the destroyed structures – it is very likely that among the buildings not specifically listed were smaller bathing establishments as well.

We should not forget here of the cutting of Constantinople's own water supply by the Avars. As the Persians were pursuing their campaign against the Romans that forced Heraclius to lead an expeditionary force away from the capital, the Avars, allied at the time with the Persians and accompanied by their Slavic allies, briefly besieged the city.[84] Fortunately for the Constantinopolitans, the Persian force which arrived on the other side of the Bosphorus was prevented (by the Roman fleet) from directly supporting the Avars, who, unprepared for a longer siege, were forced to withdraw after well over a week of assaulting the city's walls – and after cutting the aqueduct. The damage inflicted on the structure must have been severe, as repairing it did not become a priority until after the great drought of 758, during Constantine V's reign. The Emperor entrusted the necessary reconstruction and maintenance to one Patricius, who recruited a large workforce from around Greece and Anatolia to fulfil the task.[85] The disruption of the water supply to Constantinople forced rather drastic changes in bathing customs and, in the long run, in the further development of the city's system of water tanks and cisterns. P. Magdalino commented that the Christian population of the city could adapt to living in the new conditions, without the sumptuous

baths and nymphea (which, taken together, used most of the water from the destroyed aqueduct);[86] this remark is similar to the one made by J. H. W. G. Liebeschuetz a few years earlier: that Christianity's ascetic ideals made impoverishment more bearable.[87] Unfortunately, there is little mention in the sources of the popular attitude towards this involuntary abandonment of luxury, and whether those affected indeed appreciated the spiritual benefits of more austere living.

While in most of the cases mentioned above we do not have a direct reference to baths, and in some of them it is clear the besieged did not use the Roman-style baths, they do illustrate the tendency of attackers to disrupt the defenders' water supply in order to obtain their surrender. While this tactic usually did not have the desired effect, it did disrupt all of the non-essential activities that required significant amounts of water – first and foremost, bathing. It will not be out of place here to recall that many of the Roman aqueducts were built first and foremost to supply the baths, rather than to provide water for daily consumption.

Construction works

The remarks contained here serve chiefly to provide some background information on the matter of construction and maintenance of the bath-houses themselves. These are necessary for a deeper understanding of comments and remarks on bath-houses and bathing found in the primary sources. Much has been written about the expenses associated with construction and upkeep of baths, as private benefactions (chiefly aimed at gaining popularity by the sponsors, especially before the economic crisis of the 3rd century), as part of the duties of local officials (decurial class) or as imperial generosity. After the 4th century, this generosity was most often expressed in reconstruction and repairs of older bath-houses that became damaged in natural disasters, rather than new initiatives; this does not necessarily signify a crisis, though – the capacity of existing baths might have been sufficient for a non-increasing population. As for private munificence, J. J. Wilkes, for example, traces it back to the old custom of throwing coins to the crowds. The changes in mentality and social developments around the 1st century CE promoted the change in the form of sharing the wealth by the richest to a more permanent and practical euergetism[88] – one resembling, to a degree, the Greek liturgies.

W. Treadgold's remarks in his popularising work *A history of the Byzantine state and society*[89] noted that many of the pleasures and entertainment offered by city life were condemned by the clerics – and among the pleasures condemned was even going to the baths; but this criticism was spurred mostly by the perceived threat of sinning for those who participated in those activities, rather than the activities themselves being sinful.[90] This is an important observation and I examine it in more detail when discussing the attitudes of churchmen towards bathing in chapter two. Treadgold also noted that while

the period from the mid-5th to the early 7th centuries was one of considerable growth in all spheres during its first half, it was followed by an unmistakeable decline in the second. Prior to the 540s, the Byzantine state could boast both successful conquests and financial stability. Following that, however, conquests became too costly and many of the re-conquered lands were soon lost. Private wealth diminished;[91] this could be observed in the cities, which, beginning from the second half of the 6th century, started losing their ancient character, and were shrinking as districts were abandoned and walls contracted. Theatres and hippodromes went largely out of use, except in the largest cities. Upkeep of most of the large public baths became too expensive: bathing took place in smaller establishments. Large, old buildings were replaced by smaller ones, the old city plan ignored. Life in the cities changed its character, Treadgold writes – but the change was not catastrophic.[92] In the late 6th–early 7th centuries, with the exception of the largest cities, the majority of the civic infrastructure was abandoned; large baths closed down, theatres and hippodromes went out of use completely. In their place, other, smaller buildings were erected, and the city life continued, albeit in a somewhat different form, while the economy suffered from much-diminished trade, especially in cities that previously specialised in a specific industry.[93] City squares were built over, but social life continued in the streets and (diminished in size) bath-houses. While the decline affected the entirety of the Empire, it was notably worse in the West.

Similar remarks can be found in a slightly later (and focused specifically on the period discussed in this work, unlike Treadgold's general synthesis) work by Liebeschuetz, *Decline and fall of the Roman city*.[94] Speaking of Gerasa, he mentioned that the temples there had been abandoned, theatres decayed, part of the former hippodrome went out of use and was built over with houses. In numerous, but perhaps not all, cities, public buildings around the fora, theatres, amphitheatres and large bath-house buildings were allowed to decay, from the mid-5th century onwards.[95] As for Gerasa, however, some new buildings did appear during the 5th and 6th centuries: work was done on fortifications, but also a bath-house was built, paid for by an *agens in rebus*; and a portico and small baths next to the cathedral were funded by bishop Placcas in 454–457. Eight of the thirteen known churches were built in the 6th century.[96]

Listing particular examples of cities which underwent such changes, and which occasionally took more drastic forms, would serve little purpose here. J. F. Wilson's monographic work on the Syrian city of Banias provides a fairly typical picture: the city shrank and declined during the late Roman and early Byzantine period and while, Wilson notes, a few cities continued to flourish, this was certainly not the case with Banias. Over time, the city underwent transformation into a mediaeval town – it shrank, becoming more compact and defensive, but would have most likely died out completely if it had not been for an influx of refugees, in the 10th century.[97] Interestingly enough, there are records of income from the baths in the city from the 10th century as well, hinting at the possibility that large baths were operational

during that time;[98] however, even if this were true, then this revival came too late to be relevant for the purpose of this study.

In the following passages, I have focused particular attention on the chronicle of John Malalas; much of his focus is on Antioch (the city with which he is associated), and the extensive information he presents on bath-houses (primarily their construction and repairs) makes his work a valuable source for my research. It is in large part thanks to the abundance of information in the *Chronicle* of Malalas that the image of Antioch, vividly painted in the orations and letters of Libanius, while much faded, remains visible. The chronicler used various sources of information for his work: archives, oral testimonies and personal experience. He is known to have travelled around the Empire and his work reflects this.[99]

In the chronicle of Malalas, one of the indicators of how good an emperor was in the author's view is the amount of public buildings he funded, or ordered to be built, as this contributed to the well-being of the people and the glory of their cities; indeed, the construction works are described by Malalas as gifts. Since much of Malalas' focus was on Antioch, he mentions particularly many of the buildings constructed there. The objects he described were almost exclusively built by the emperors present in the city itself – or, at least, that is the impression he conveys. In reality, some of the structures were built without direct imperial involvement or supervision, and in some cases, Malalas attributed the euergetism to the wrong emperor altogether.[100] Despite these serious shortcomings (or perhaps because of them), the *Chronicle* can be seen as an expression of certain ideas and concepts commonly associated at the time of the *Chronicle*'s composition with major public works (the building of public baths appears most often in this context). An obvious implication of the author's tendency to assume a direct involvement of the ruler in large-scale euergetism is that private benefactions during the second half of the 6th century were exceedingly rare; the perceived necessity of the emperor's presence for (at least) initiation of the project is also telling. On the other hand, Malalas can be at least partially justified for making assumptions that reflected the reality of his times (but not necessarily of the past): even the 4th century was a period when the imperial presence in particular locations boosted its significance (and wealth) considerably – evidence of such imperial activity might have convinced Malalas that the public works were all initiated in a manner similar to the one he knew from personal experience; indeed, he does not seem to know much about private euergetism.[101]

Malalas recorded how Hadrian (117–138) ordered the senators present in Antioch to reconstruct the city's baths after an earthquake,[102] the reconstruction of Centenarium baths by Marcus Aurelius (161–180) after another earthquake[103] and how Commodus (177–192) built a bath, named by him Commodium.[104] A number of baths are linked by Malalas to the reign of Septimus Severus (193–211): one of these, called Severianum, was built in Alexandria, as a sign that the Emperor forgave the city for supporting Pescennius Niger (193–194) against him.[105] Malalas mentioned that Severus

arrested one Thermos, Niger's friend, who was notable for building another bath in Alexandria. While rebuilding Laodicea, which Pescennius destroyed for resisting him, Severus built a bath-house in the vicinity of the city's harbour, as there was a suitable spring located there.[106] In Antioch itself, he built a bath in the eastern part of the city, called Severianum (similarly to the one in Alexandria); Malalas ascribes its construction to gratitude for the "omen of victory" (acclamation Severus received before he left to fight Niger in Egypt).[107] Another public bath was ordered to be built from funds left over from money set aside for heating of the baths that collapsed in an earthquake. The new bath-house was built in the city, on the terrain bought from one Livia, and ultimately called Livianum, as a compromise, since each of the officials involved initially wanted to have it named after himself.[108] This is a good example of the tendency to seek fame and lasting memory, preserved in the names of public utility buildings. Other baths built in Antioch included Diocletianum, constructed during Diocletian's stay there (299–302) at the time of his Persian campaign;[109] Malalas also mentioned that Diocletian built other baths in Antioch, including the Senatorial baths. The chronicler gives much credit to Valens for building a number of structures in Antioch, including basilicas and a public bath located near the hippodrome.[110]

Moving away from Antioch, it might be worth mentioning here that the old palace of Marcus Vipsanius Agrippa (influential politician and consul during the latter half of the 1st century BC) in Caesarea Philippi was remade into a bath-house sometime during Hadrian's reign – the baths were provided with water from a local spring.[111]

Malalas credited Constantine with finishing the construction of the baths of Zeuxippus in Constantinople, which were re-decorated by the Emperor with columns, marbles and bronze statues. These statues deserve additional attention: they were described in the work of Christodorus, a poet, active during Anastasius I's reign (491–518).[112] Described in verse and the form of *ekphrasis*, over eighty statues are listed, and it is clear that the collection was rather eclectic. Gathered primarily during Constantine the Great's reign to embellish the Zeuxippon, with the collection expanded in the following decades, the statues represented deities, mythological heroes and historical figures. The focus in creating the second largest collection of statuary in the new capital (beside the Hippodrome) was on tradition and symbolism, and underlined the *Romanitas* of the New Rome. At this point in time there appears to have been no objection on the part of Christians to the display of effigies representing pagan deities; arguably, they were a part of the common cultural heritage. Malalas mentioned that the baths were officially opened on 11th May 330 (as part of consecration ceremonies of the city), a good indicator of how important the facility was for Constantine; the great bath-house was necessary for the city's rebirth in its new role as the capital.[113] If the capital city was indeed treated by the Emperor as his possession,[114] then Constantine made sure that his bath-house properly represented this.

A link can be made here with the Carosian and Anastasian baths in Constantinople, described by Malalas and attributed by the chronicler to Valens; some of the ancient authors claim that they were both named after the Emperor's daughters.[115] The choice of buildings that were given the names of Valens' children is interesting in itself, as it reasserts the importance of the bath-houses as public structures that, apart from their material functions, were used for the honouring of important people. Ammianus Marcellinus states that the Anastasian baths were named after Constantine's sister[116] – this can be easily explained, however, by the fact that both the sister of Constantine and Valens' daughter shared the same name – and that both of the Emperors were involved in the building of the same structure. The eponymous sister has apparently disappeared from popular memory and the bath-house became firmly associated with the later Emperor's family member. The commemorative function of the baths, as well as of other edifices, is mentioned by Chrysostom. For various reasons, however (discussed in the second chapter), he did not deem the patronage of civic infrastructure such as baths to be particularly beneficial (at least, not as much as supporting the Church would have been).[117] One of the points made by Chrysostom to discourage excessive investments in secular structures was that buildings might be eventually used by the patron's enemies. A case where this might have actually occurred, though in rather specific circumstances, has been described by Procopius in the *Wars*, where the Persian commander is said to have been anticipating having a bath in the recently completed Roman bath-house in Dara (more on this later).[118]

Describing some of the more notable buildings from across the Empire, Malalas mentioned that an exquisite bath-house in Gortyn, Crete was destroyed, together with much of the city, in an earthquake.[119] The author goes into much detail when describing the destroyed bath-house: the building consisted of 12 chambers, each representing a month. One furnace was sufficient to heat the whole building – a feat of construction that deserved a separate mention. Theodosius II restored the summer and winter parts (as was requested by the local landowners; it is not mentioned whether the locals restored the rest of the bath-house or not), in addition to money provided for restoration of the area. Malalas mentions (without going into detail) that a different arrangement of chambers was used for bathing each month, and describes the bath-house as "perfect"; judging from this remark, the bath-house must have indeed been exceptional, as its layout, decoration and technical arrangements (furnace) are all mentioned. The fact that the bath's description occupies a significant amount of space in the chronicle attests to the continued and very strong (positive) feelings the Romans had for bathing during this period.

Among the other reconstruction efforts listed by Malalas, the example of Nicomedia is rather prominent. After the city suffered from an earthquake (for the fifth time in total, according to Malalas) and was flooded by the sea,[120] Theodosius constructed many buildings in that city: these included public

baths, but also churches, the harbour and others. The imperial involvement in the reconstruction is, again, presented here as necessary. Similarly, during Marcian's reign (450–457), Tripolis in Phoenicia Maritima "suffered from the wrath of God".[121] There was a bath-house there, known as Ikaros, and it was rebuilt. It was known for its statues, depicting famous mythical characters.

A notable for its scale and lack of imperial involvement bath-house building undertaking was mentioned by Theophanes in his *Chronicle*, in the entry on AM 5959 (466–467 CE). It includes information that during this year a workforce of three thousand men was employed in Alexandria for building of a great pool in the district of John, along with two baths, which were called Health and Healing (ἡ υγεία και ἡ ιασίς – *he Hygeia kai he Iasis*).[122] This account is notable not only for the large number of workers involved in the construction, but also for mentioning their number in the first place; it was apparently impressive enough to be recorded in the chronicle. It is also telling that Theophanes specified that the workers were employed by the city itself – the buildings were constructed from the city's own means, without the involvement of an outside benefactor; clearly, that was something unusual for works of such a scale, and an impressive display of Alexandria's wealth, status and lack of actual need for benefactions. The choice of neutral (that is, not commemorating individual people) names for the baths further highlights that they were the result of a common effort and civic pride, rather than individual euergetism.

The perceived need for imperial donations is expressed once again in Malalas's text when he is describing the works of Emperor Anastasius I, who is shown as especially active in expanding infrastructure. Apart from investing in and heavily fortifying the captured town of Dara near the Byzantine–Persian border (new buildings included two baths, which open the list, and cisterns),[123] the emperor, as a "gift to taxpayers",[124] initiated construction of many city walls, aqueducts, public baths and other buildings. Malalas indicated that the Emperor's increased activity was spurred by an omen of his coming death, suggesting Anastasius' desire to be remembered as a good and kind emperor – again, through the association with benefactions, among which providing bath-houses for the citizens was the most prominent. Malalas further gives Justinian the credit for building two churches, a bath-house, a hospice and some cisterns in Antioch.[125] In addition, sometime during the October of 527, Justinian sent the newly appointed *comes orientis*, Patricius, to Antioch, with a considerable sum of money for the reconstruction of Palmyra in Phoenicia, its churches and baths in particular.[126] The chronicler does not mention the reason why it needed reconstructing. Another official active during Justinian's reign, *illustris* Hesychius, restored a public bath-house in Miletus, regulated the Maeander and built a large church in the city.[127] Despite these projects, completed by the private benefactor, the city did not experience a major revival; for example, already in the 6th century the city's old market was demolished; the lack of significant imperial interest (and resources) could not have been replaced even by wealthy individuals.

As for Constantinople, Justinian finished the Dagistheos baths, started by Anastasius and named after the area in which they were constructed.[128] During his reign the city was more than once damaged by earthquakes, especially during 554 and 557 AD; baths are mentioned among the buildings destroyed in 554. Malalas does not state that they were rebuilt, perhaps considering it to be obvious.[129]

Procopius, in his *Buildings*, described how Emperor Justinian I built baths at Bithynian Pythia, utilising the natural spring to provide them with hot water; he also mentions that the local populace knew of and utilised the curative properties of the spring long before the baths were constructed.[130] What was, then, the significance of building a bath-house in a place where people already bathed? While Procopius is not writing about this in an explicit way, it appears that the place has finally become truly Roman, thanks to the Emperor. The type of bathing that the natural setting necessitated was replaced by a more "civilised" one. Still, it was the constant flow of naturally hot water that caused Justinian to consider the benefaction in the first place; the possibility of implementing an elegant solution to the major issue of heating and supplying water to the baths such as this must have had a strong appeal to the ruler with a keen interest in building. The same fragment mentions Justinian's reconstruction of the great baths in Nicomedia which collapsed in an earthquake. Because of the building's size, many thought that it would not be rebuilt; apparently only the Emperor's unexpected and benevolent intervention allowed the reconstruction to proceed. Jean-Michel Spieser observed that one of the reasons for Justinian's wide-scale building programme was the inability of individual cities to manage their own construction needs.[131] The reason for this, he suggests, was not so much impoverishment of the curial class, but rather the increasing number of people who, by "escaping" into senatorial ranks, became exempt from the duties towards their cities. Greece, Spieser notes, is not mentioned among the areas where Justinian was ordering the construction of bath-houses; the monumental buildings there did not undergo many changes over the period of the 3rd to 7th centuries, and the baths changed the least.[132]

The Riot of Statues

In the following section I examine one of the most notable events that took place in Antioch in the 4th century – the so-called Riot of Statues. This well-known event is going to serve as a *sui generis* case study, as the events involved, and the reactions to these, allow us to gain a considerable insight into the importance of bathing for the day-to-day functioning of a major city. My focus is primarily on the account of these events provided by John Chrysostom, who on several occasions made remarks relating to the closure of the city's bath-houses, and bathing in general. It needs to be said that the emperors, who often used their wealth and power to provide free bathing for all, occasionally also used their authority to deprive their subjects of their

daily pleasures as a punishment. The events that shook the proud city of Antioch in 387 are a prime example of this; the material discussed below also touches on the subjects of social interaction and medicine, albeit to a lesser extent. It may be worth noting here that the Riot of Statues, the aftermath of which I am going to discuss here in more detail, started in the baths as well.[133] This should not come as a surprise; one would be hard-pressed to find a better spot for a lively exchange of grievances – with enough people present to instantly form at least a small mob. After the riot, Theodosius I ordered the closure of all of Antioch's baths and theatres; these events were related in vivid detail by John Chrysostom, on whom fell the task of providing the spiritual guidance to the Antiochenes in the aftermath of the disturbances. The preacher seemed glad that the various entertainment facilities, like theatres, were shut down, but sympathised with his fellow citizens, especially the sick, elderly, and pregnant women, who all relied on bathing for relief.[134] The disturbances could have had, however, more immediate dramatic consequences. The civic infrastructure, as was already discussed, was at constant risk of fires, whether resulting from natural occurrences, accidents or riots; on this occasion, no large-scale damage occurred.

During the riot itself the imperial effigies were torn down and defaced, an act that comprised treason, and which greatly enraged Emperor Theodosius I. The restrictions immediately imposed on the city included the ban on all public entertainment and closure of bath-houses. This was regarded as a severe punishment: bathing, Chrysostom wrote, is a necessary medicine for those of poor health – for people of either sex and any age; women who have given birth recently are among those who would especially need to use the baths,[135] and Chrysostom calls being forbidden to bathe a grievous matter but, at the same time, he considers the restrictions to be much less harsh than what might have befallen the Antiochenes. As the weeks passed, however, a group of (as might be guessed, young) citizens decided to circumvent the restriction on bathing, and went to the riverbank, where, as Chrysostom reports, they indulged, apart from bathing, in dancing and general merriment, and even pulled some women into the water. Chrysostom was appalled by all this: morally dubious riparian activities aside, the whole event, which apparently drew considerable attention, could have drawn the renewed ire of the Emperor, and resulted in further and more drastic punishment of the city. It is worth noting that the event took place only about three weeks after the closure of the city's baths: the need for bathing, together with the lack of other forms of "civilised" entertainment, made people seek less cultured forms of social interaction, even despite the risks; Chrysostom reminded his audience that before the initial restrictions were imposed, many were prepared to flee the city in case Theodosius decided to punish them in a violent manner. To realise that the risk was quite real, one only needs to recall the massacre in Thessalonica that the temperamental Emperor ordered merely three years later. Ultimately, Chrysostom was concerned that carefree and frivolous actions might draw new dangers on the Antiochenes, and urged

his listeners to admonish those seeking to bathe despite the closure of the public baths.[136] The excursion to the riverside, while allowing bathers to wash themselves, was clearly also a form of – apparently juvenile – entertainment. Chrysostom's concern, however, was about the timing and possible repercussions of the event, rather than bathing in the river. It is not easy to draw definite conclusions from the evidence available, however; we do not know whether, and if so to what extent, Antiochenes were bathing in the river prior to the imperial edict; it is quite likely that especially the young people might have enjoyed the natural setting and unrestrained environment. Due to the limited testimonies, it is difficult to say whether what Chrysostom described had been a reaction to the change and evidence of Antiochenes adapting to new circumstances, or simply a more or less ordinary event that drew attention because of external causes. Procopius mentioned another instance when the citizens, this time of Rome itself, were unable to use the baths, due to aqueducts having been cut by the Goths; he does not make any mention, however, of Romans using – or seeking – an alternate way of bathing.[137]

Symbolism of the baths

I am now going to examine in more detail the symbolic aspect of Roman bath-houses, and by extension, of bathing itself. Much of this considerable symbolic value can be attributed to the link between the bath-houses and the wealth necessary to build and run them, strongly tying symbolism of bath-houses with various aspects of patronage and euergetism. Some of the symbolism came from the undeniably Roman character of the bathing, as a primarily social and cultural activity. Examining this aspect of bathing in more detail ought to prove particularly useful for establishing the degree to which this form of leisure was ingrained in Late Antique daily life. The symbolism, in some cases, was very obvious: Procopius relates an interesting story of the Persian ruler, Chosroes, taking a bath. The author of the *Wars* describes how the King, after sacking a significant part of Roman territories and capturing Antioch (in AD 540), went to Seleucia (Pieria) and there bathed in the sea.[138] He bathed alone; while the act itself was clearly intended to have a significant symbolic meaning (the Persian ruler was bathing in the Roman sea), at the same time the action itself was presented to Procopius' readers as un-Roman as possible: not only did Chosroes prefer the sea to the excellent baths he could find in any of the captured cities, he also bathed alone; while this was not specifically pointed out by Procopius, such behaviour was in stark contrast to the Roman tradition of communal bathing. In addition to that, he also made sacrifices to the sun – by that time, an action unacceptable to the Christian majority of the Roman Empire. Throughout the text, Chosroes is portrayed as a cunning and untrustworthy ruler. Thus, it is likely that even a seemingly straightforward activity was presented in a way indicating a deeper meaning, hinting at the Persian ruler's foreignness and creating hostility towards him in the readers through the subtle choice

of words. Regardless of this, the act of bathing in the sea should primarily be seen as an explicit expression of power, and there can be little doubt that Procopius' readers would have missed this.

Two earlier passages from Procopius's *Wars* mention how a Persian commander of a besieging force demanded that Belisarius, who found himself surrounded in the recently re-fortified city of Dara (during the summer of 530), should prepare a meal and a bath for him.[139] This information is provided twice, perhaps because of its unusual character (the first time as a part of narration, the second time in a letter that was included in its entirety in the book), or perhaps the demand was, indeed, made twice: at the very beginning of the siege and later on in one of the letters that were exchanged during the siege. The Persian *mirranes* (commander), named Perozos (Firouz), made his request indicating that he intends to eat and bathe the following day – after he captures, or receives the surrender of, the city. The tone of the Persian commander's letters is that of obvious mockery: Dara had been captured by the Byzantines not long before the described events took place and had been fortified considerably; the bath-houses there were also newly built and Perozos's "request" was to indicate that the Roman facilities were very soon going to accommodate the Persians; this, however, did not happen. Procopius tells of an interesting event that took place during the siege: a young Persian soldier issued a challenge to the Romans, challenging anyone brave enough to a single combat; Andreas, an instructor of a wrestling school and serving at the time as an attendant of one of the officers, Bouzos, accepted the challenge, and won.[140] Another Persian soldier, an experienced veteran, also issued a challenge, and was similarly defeated by Andreas. While the duels certainly helped to raise the morale of the Romans, Procopius felt it necessary also to inform his readers that Andreas' duties included assisting Bouzos in the bath, making the situation somewhat ironic: after the *mirranes*' demands for having a bath prepared, two of his bravest soldiers were killed by a "bath attendant"; Procopius did not, however, use the occasion to draw more humour from the situation – quite likely, the vision of Romans defending their baths in combat would have detracted somewhat from the tone of the narrative. Did Chosroes know about these events? If he did (and it is quite likely, as during the last years of his father's rule he already played a significant role in politics), then perhaps his immersion in the sea had the additional significance of "avenging" the failure of his father's commander? While Perozos could not enjoy the bath in the Roman building, ten years later Chosroes could freely swim in the Roman sea.

Much can be said about the cultural symbolism of the baths: bath-houses are, and were, widely recognised as one of defining elements of *Romanitas*, the culture as whole; and the contemporaries appreciated this as well: both the Persians and the Huns (more on them later) constructed bath-houses, modelled on the Roman ones, although for different reasons; when Chosroes, after sacking the city, recreated Antioch on Persian soil,[141] he provided the new city with every typically Roman feature, including the baths.[142] The

city was then populated by captives taken from the Roman Antioch. A. Kaldellis noted that the whole arrangement was to serve as a symbolic extension of Chosroes' rule; but at the same time it also showed that the new city would be quite different from other Persian settlements. A. Cameron noted that Procopius's portrayal of both Chosroes and Justinian serves to explain events by referring to the personalities of the rulers, rather than objective circumstances. Chosroes is shown to be capricious, scheming and dishonest.[143] Whenever he is shown in a perceived attempt to resemble a Roman (or, as in this case, trying to create something – a city – that was supposed to be Roman-like), it is evident that the Persian ruler is a foreigner; the King's actions by the sea hint at this even further. The passage from *Wars* also shows that the baths were seen by Chosroes as one of the most important characteristics of the Roman way of life.

One of the more interesting accounts concerning the foreign adoption of Roman customs describes a bath-house built by the Huns; it served to emulate Roman luxury and customs, and it was, perhaps, also an expression of snobbism.[144] Recalling the embassy to the Huns of 448, of which he was a member himself, Priscus of Panium (died after AD 472) tells the story of an unfortunate Roman who was captured by the barbarians: he was ordered to build a bath-house, and hoped that he would be released upon its completion. The Huns, however, still needed someone to perform the function of the bath's attendant, and the duty was forced on the hapless builder. While mentioned in an anecdotal manner, the story is a clear evidence of the influence the Roman way of life had on the neighbouring peoples; Roman luxury was desired (and obtained) by Onegesius, who was described by Priscus as the second in command among the Scythians (as he referred to the Huns). If we remember that the same account also mentions that Attila himself avoided any luxury, the evidence is all the more compelling: even the highest ranking among barbarians considered the Roman way of bathing superior to others, and clearly preferred it to the less civilised ones. Furthermore, it seems that from all of the Roman institutions, baths had the greatest appeal to the Huns, as they did not seem to bother with re-creating other elements of Roman culture; this could also mean that the bath-house was relatively easiest to obtain and use and was perhaps the most cost-effective way of imitating an obviously Roman custom. Priscus mentions that Onegesius' bath-house was used extensively for social interactions, perhaps further hinting at the emulation of Roman culture.

Nudity and its implications – social and sexual attitudes

Nudity was an inextricable element of bathing, and thus necessarily had an impact on the perceptions of the activity. In this section I explore the social and sexual attitudes to nudity in a bath-house environment by examining several of the sources mentioning the subject. Making an argument during one of his homilies, Chrysostom remarked that no shame is caused by nakedness

in a bath-house, and goes as far as to include himself among the bathers.[145] He attributed the lack of shame to the presence of other naked bathers; this allows to make a case for baths being a place where some, at least, social norms were suspended. Shared nudity, in the context of a bath-house, was commonplace and accepted. This context appears to have also made the ubiquitous nudity, for the most part, de-sexualised; this most likely is what prevented the bathers from feeling ashamed in the first place, and indicates that nudity was the norm at public bath-houses at the time (late 4th–early 5th centuries).

Another indication of the normality of nakedness in the baths comes from a commentary on the letter to Timothy: the baths are the place where both the influential and the poor are alike (naked).[146] An interesting concept, to be sure, but it would seem it only holds up to a point: Chrysostom himself often remarked about ways in which the rich ensured that their status was visible to all, most commonly by having a numerous retinue of slaves following them around and separating them from unwanted interaction with the lower classes. Incidentally, it is also in this passage that Chrysostom observes that the influential bathers have been in the past exposed to dangers in the baths after they remained there while their servants left, for one reason or another. I am going to return to the subject of vulnerability in bath-houses later.

Arguments can be made for nakedness in a bath-house fulfilling the function of a social leveller, and these will be addressed in subsequent parts of this chapter. F. Yegül, however, stated that visiting baths provided merely an illusion of a classless society.[147] Easily accessible and open to everyone, baths differed significantly from, e.g., theatres and arenas, with their strict separation of seats. Slaves were allowed in the baths, often not only as attendants of their masters, but they were also permitted to bathe with them, or on their own. Yegül also expressed the (more than likely, in my opinion) idea that some of the smaller baths functioned very much like modern-day private clubs, or that they catered to a specific social group. He brings up the example of the baths of Etruscus mentioned by Martial (died ca. 102–104)[148] or the Hunting Baths from Lepcis Magna, with their distinct decoration – which in itself, however, cannot be treated as definite proof the bath was used as, e.g., a club-house of sorts for the local hunters, given that we have no information about the reasons behind this particular choice of embellishment. Aside from potential 'exclusive' baths, Yegül continues, people would have had their favourite places – not unlike modern cafes, lounges or pubs. He concludes that 'classlessness' in baths was only illusory. The number of slaves and attendants, behaviour of bathers and their speech would still have distinguished the elite from others. Indeed, while nudity might have created an appearance of equality – something that the Church authors were so keen to note – the status symbols were still present and visible. G. G. Fagan was a little more appreciative of the role of baths as potential social levellers, but ultimately rejected this idea as well.[149] He argued that while there was a possibility of segregation of the sexes, there is no evidence to suggest that there

might have been segregation due to social status of the bathers – at least as far as the large, public baths are concerned (which, as Fagan notes, were most often located in the heart of the city, or by the city gates – further suggesting their availability to all); he does admit, on the other hand, that there might have been some ways of separating bathers at the establishment's doors – by means of high entry fees, or screening by the entrance; Fagan mentioned two such exclusive baths – the Sarno baths at Pompeii and the baths of Etruscus in Rome. Necessarily, while their patrons may have indeed been equal within the building, a bouncer's presence by the door ensured only those entitled to entry were admitted. In large, public bath-houses, however, by and large members of all of the social groups could freely meet; this might have indeed created an impression of baths as serving to negate social differences. Fagan argued, however, that, unlike in the case of *convivium* (a form of banquet during which men of different ranks could freely interact on roughly equal terms; somewhat similar to the Greek *symposium*), there was no widespread ideology of equality in the baths, and points to the single example he found in Clement of Alexandria's *Instructor*[150] (I will be showing later that there were a few more examples of this idea in the section of this chapter devoted to displays of wealth in the baths). Fagan further argued that even if there had been such ideology, it would not have necessarily been something that found a practical reflection in daily life. He brings up the criticism which was occasionally levelled at the hot baths, which claimed that they had a negative impact on military discipline and strength in general – and yet the existence of hot baths is attested all over the Empire, including inside military camps. This is used to prove that even if certain views were held by part of the elite, it does not necessarily mean they were shared by all, or that they had any major impact on the society as whole. Certainly, the preaching and writings of prominent Christian churchmen, discussed later in more detail, do appear to have been expressions of what they wanted their communities to be like, rather than a reflection of their actual state.

Ultimately, Fagan argued that for the well-off, baths were a place where they could show off and make a spectacle – its elements would include the size and composition of the slave retinue, jewellery and behaviour. Despite all the mingling, everyone knew perfectly well where they stood on the social ladder. It might be worth noting here that in the context of apparent equality Fagan brought up the matter of *bullae*, amulets worn by freeborn youth (by relating Plutarch)[151] – these might have been used to distinguish the free from the slaves, and thus deter older men from making unlawful advances.

Some interesting arguments (although not accounting for legal implications of homosexual advances on freeborn youth) on the possible meanings of nudity can be found in A. Eger's paper: the author argues that since the clothes, indicating social status, were left upon entering the bath-house, baths created opportunities for subverting social roles, and that the darker and more private sections of bath-houses may have become a "subversive sexual space", allowing to exploit the already existing nudity.[152] That said,

despite the likelihood of such occurrences, there is precious little evidence in the late Roman sources that would be even hinting at such behaviour; Late Antiquity has left us without its Martial, who several centuries earlier indulged in sketching some highly colourful scenes of lively debauchery that went on in bathing establishments (among other locales). Perhaps the only relatively well-known case of homosexual behaviour from this period is the one that resulted in the execution of its perpetrator, a popular Thessalonican charioteer, which sparked a violent riot by the man's disgruntled fans.[153] This in turn led to a massacre ordered by the impulsive Emperor Theodosius I, and somewhat later the famed episode of allegedly seeking forgiveness by the Emperor from the bishop of Milan, Ambrose (ca. 340–397); but that is of little importance here. The sources discussing these events shy away from providing details of the offence that started the chain of escalating events, and do not mention where it was supposed to have occurred. A rare and unusual record of a possible sexual attraction between two women was made by Socrates, the Church historian. He related how Valentinian I's (364–375) wife, Severa (died prior to 375), was charmed by the beauty of Justina (the daughter of Justin, the late governor of Picenum), after seeing her in a bath;[154] the passage mentions a longer period of familiarity between the two women, which eventually led them to taking baths together. Socrates strongly hints at Severa's infatuation with Justina, inflamed by seeing her beauty in the bath; the Empress described Justina to Valentinian, who eventually married the girl.[155] Regardless of whether the event took place after Severa's death or not, the passage clearly indicates that in certain circumstances, physicality and nudity did play a significant role during bathing, one that went beyond the blurring of social distinctions more commonly acknowledged by the sources. Nonetheless, with only vague hints and possibilities and the lack of any tangible evidence, one can only speculate on the cause of this state of affairs. A good reason for the silence of the sources would be the very nature of the majority of the preserved material: whether historical or religious, the accounts had little room for describing forbidden relations, either due to their relative irrelevance, or sheer perceived impropriety; on the other hand, at least some attention was devoted to the matter of sharing bathing space between men and women.

Mixed-sex bathing

Few aspects of Roman bathing attracted as much attention as the question of the extent to which members of the two sexes bathed together. As discussed below, this matter remains somewhat controversial, and the issue is occasionally muddled by modern assumptions and preconceptions. My chief aim here is to examine the available evidence and, where necessary, confront the existing opinions on the subject. Since the later sources contain relatively few remarks on this matter, it should not be out of place to include some of the remarks concerning the (predominantly) earlier period. F. Yegül stated that

mixed bathing was the norm for most of Roman history – but at the same time was being criticised and rejected by the more conservative authors.[156] Indeed, the first public baths in Rome were divided in two parts, for men and women. Vitruvius advised the same, suggesting locating the two hot rooms adjacent to each other. Baths from Pompeii and Herculaneum did, in fact, follow this layout.[157] Addressing the issue of whether men and women bathed at the same or different times, Yegül concluded that most likely both were true, depending on the period discussed. A problematic (see below) law separating the sexes in the baths was introduced by Hadrian.[158] This law was later confirmed by Hadrian's successor, Antoninus Pius (138–161), but was eventually lifted by Heliogabalus (218–222).[159] Continuing his argument, Yegül mentions source remarks talking of "baths for men" and "baths for women"; for example, Severus reportedly punished soldiers who were bathing in "baths for women" in Daphne. Furthermore, there is an inscription detailing the way in which a bath-house at Vipascum (Portugal) was to be run, and included rules governing the opening times of the baths, half of the time for women, the rest for men. Noting that this is but a single example from a far province, Yegül argues that baths were one of the more unified institutions of the Empire in the way they worked, and therefore it is not unlikely that this particular evidence was, as far as bathing time arrangements were concerned, unique.[160] Quoting Fagan,[161] Yegül commented that the bathing arrangements were, most likely, significantly different depending on time, place, arrangements in particular baths and personal morals of the bathers. Finally, remarking on an inscription that called for aid of the god Silvanus to help stop women from entering the pools reserved for men, Yegül agreed with Rudolfo Lanciani that preventing such occurrences from happening was apparently beyond human power.[162] In addition to the earlier remark, Fagan concluded that bathing in mixed company was not uncommon, and that Martial found himself surprised at the unwillingness of women to bathe with men – but reminded the reader that one should remember Martial's own morals when it came to sexual matters.[163] Finally, an article devoted to the subject by R. Bowen-Ward rather firmly rejects the idea that men and women bathed separately, by questioning the very existence of the alleged edict by Hadrian that forbade mixed-sex bathing and examining literary (including early Christian) evidence. His conclusions are clear: the abundance of references to men and women bathing together, whether made as a matter of course or in a critical manner, indicate that at least in public establishments the bathing space was shared by bathers of both sexes.[164]

Justinian's legal novels addressed the matter in a straightforward, if somewhat narrower, manner – leaving little doubt that it was perfectly acceptable for a married woman to bathe with men other than her husband – as long as the husband expressed his consent to that. Such an agreement should not be read as the husband's permission for any impropriety (although, conceivably, the possibility of impropriety arising from such encounters could not be ruled out). For a woman, bathing or dining with men without her husband's

consent was considered one of the valid reasons for divorce,[165] or flogging.[166] The passage about banqueting or bathing with other men is accompanied by description of other activities that, when performed without the husband's permission, were deemed a sufficient reason for repudiating (or beating) one's wife. These included remaining away from the husband's house or participating in entertainment in public places, such as theatres. This is perhaps one of the most useful source remarks from this period that provides a clear answer to the question of mixed bathing, even if it does leave open the question of just how widespread the practice was; clearly, at least widespread enough to warrant a mention in the law. The very fact that dining and bathing were put together side by side indicates that both activities were deemed equally 'dangerous'. There is only a small step from there to concluding that these particular laws were concerned not so much with public morality (after all, no mention is made of unmarried or widowed women), but with strengthening the husbands' control over their spouses. After all, no distinction is made in law between a woman's family and any other men; should one be willing to risk over-interpreting the law, read strictly, it extended the husband's power to the point where he could, potentially, prevent his spouse from maintaining extended contact with her male relatives.

Bath-houses as a social space

Having examined the possible implications of nudity in the bathing environment and of sharing the bathing space by men and women, I am now going to explore the more general social aspects of bathing. This is necessary for a better understanding of the role bathing played in day-to-day life, as well as of the opinions and comments on the matter that were expressed by the Romans themselves. Describing the excesses of contemporaries in Rome, Ammianus mentioned that the upper-class citizens would, for example, come to the baths with fifty of their own servants, and still demand the services from the bath's attendants.[167] Furthermore, these people would have considered it a courtesy to merely ask a person what hot baths or waters they were using or where they were staying; and when leaving the baths, even outside of Rome (like the baths of Silvanus in Campania) or "healing waters of Mammaea" Baiae, the rich get "dried with the finest linens" and carefully choose from splendid clothes to wear, which they bring in overabundance even to the baths ("he brings enough with him to clothe eleven men").[168] Ammianus was not alone in noting the showcasing of one's material standing in bath-houses; Chrysostom makes numerous references to baths as meeting places: among their other uses, baths seemed to be a popular place for, again, presenting wealth for all to see; along with theatres, Chrysostom mentions the baths as providing an opportunity for women to appear in their best attire.[169] Interestingly enough, he uses the opportunity to jab at the Empress, pointing out that even if she suddenly appeared in the church, covered in gold, at the same time as St. Paul would, he would attract more attention,

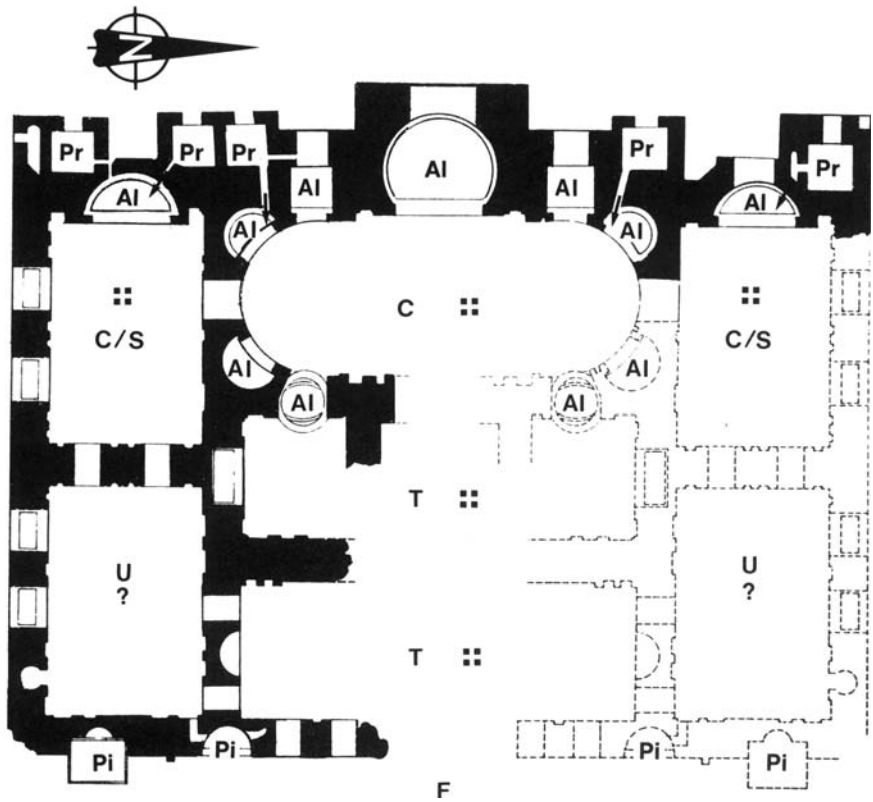

Fig. 1.1 Kôm al-Dikka baths, Alexandria. Reproduced by kind permission of Inge Nielsen, author of *Thermae et balnea. The architecture and cultural history of Roman public baths*, and Aarhus University Press.

as there are many women who possess splendid clothes (but there is none other as great as St. Paul). Another criticism on how gold is used in adorning people (and even prized animals) appears in the commentary on the letter to Philippians; the bishop mentions here a saying stating that the jewellery loses much of its value in the baths, among other places.[170] As for the retinues of slaves accompanying their owners, Ammianus wasn't alone in mocking them; baths, together with the fora, are mentioned by Chrysostom as places where the rich would show off their wealth, by the means of having a swarm of servants and slaves following them.[171] In a different context, the image of the master followed by his entourage, again to baths (and theatres), returns when Chrysostom complains about the lack of interest on the part of masters in the spiritual well-being of those who serve them. Apparently, not only did the masters refrain from bringing their servants and slaves to church with them – they did not even compel them to go there on their own![172]

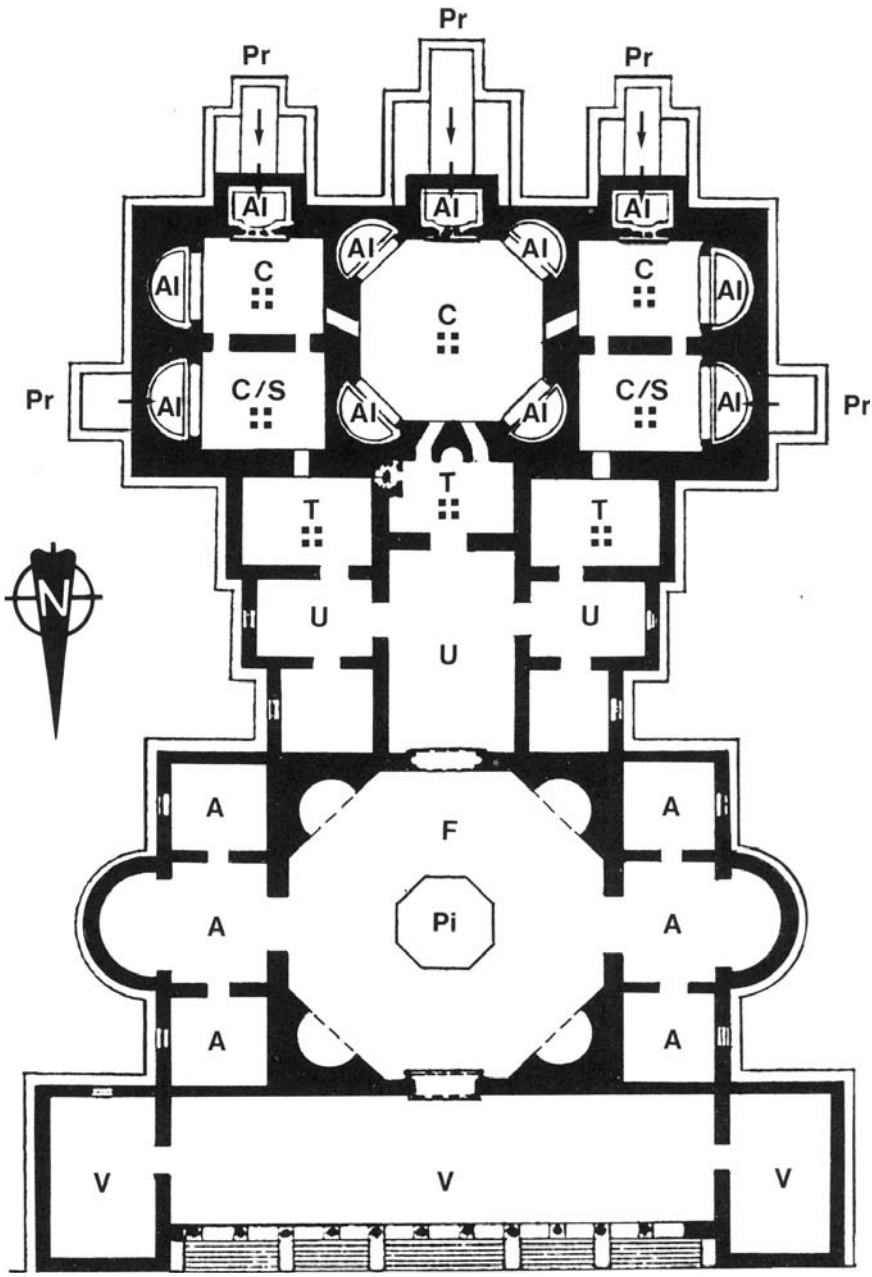

Fig. 1.2 Bath "C", Antioch on the Orontes. Reproduced by kind permission of Inge Nielsen, author of *Thermae et balnea. The architecture and cultural history of Roman public baths*, and Aarhus University Press.

The question of the spiritual value of compulsory church attendance is not raised. The image of the rich man, followed everywhere by his slaves, appears again, this time to exemplify how, in reality, the owner becomes as a slave himself, for he fears to go anywhere (to the market or the baths) without his entourage, while his slaves can move freely even without him. The difference in rhetoric is quite significant here: the entourage of servants here is not just a display of wealth, but a necessity born out of fear. Context implies that the riches themselves are the cause of distress – or more accurately, the fear of losing them. Chrysostom's message is clear: how much happier a poor man is, being able to go wherever he wants without worry! As for whether the slaves were able to use the public baths, G. Fagan concluded that typically Romans did not object to this, though many questions regarding this subject remain: there is no conclusive evidence on whether the slaves could bathe together with their masters, for example, and little evidence to examine the possible changes in the general attitudes over time.[173] In any case, taken together, the remarks on the various possessions brought to – and displayed – in bath-houses paint a vivid image of the wealth being shown off there, underlining their role as a prime ground for social interaction.

I am going to return to the matter of Christian attitudes towards bathing in the second chapter; however, some of the Christian sources (as we have already seen) can be rather useful in constructing the more general picture of the social activities happening in the bath-houses. The image of baths as lively, noisy places is often reinforced by off-the-cuff remarks in Chrysostom's homilies. On more than one occasion, the churchgoers are admonished about their inappropriate behaviour in the church – one that would be more appropriate, even expected, in a bath-house.[174] It is difficult to establish to what extent the reprimanded churchgoers were unusual in their implied irreverence – at the same time, however, Chrysostom's repeated complaints help to reinforce the image of bath-houses as full of unrestrained conversations and socialising. Elsewhere, a visit to the baths is treated as yet another occasion to lead a discussion, one on par with having a meal: here, however, the emphasis is on what Chrysostom would like the topic of such conversations to be: Hell. Keeping the threat of eternal suffering always in mind would, in the preacher's opinion, turn away the thoughts of people from both earthly pleasures and from suffering alike.[175] As with much of Chrysostom's preaching (and preaching in general), however, the reader can easily guess that the everyday habits of the Golden-mouthed sermoniser's listeners were exactly the opposite to what the homilies aimed to instil, once again hinting at the lively conversations enjoyed while bathing. The image of a bath-house as a busy and noisy place is reinforced by some remarks from the 2nd-century dream book of Artemidorus, who expounded the meaning of a bath-house appearing in a dream as indicating turmoil and disturbance – in accordance with the qualities associated with baths.[176]

These examples show well how common and popular baths were in terms of social interactions that occurred therein; in this respect, they appear even

more frequently than taverns, cook-shops and the like. This image is supported by a fragment of a different homily, where the bath-house is presented as a place where ordinary men (as opposed to monks and ascetics) hurry after a day's work.[177] Another allegorical story talks of a woman going about her everyday matters, such as visiting the bath-house or shopping at the market (more on this below).[178] In Chrysostom's opinion, a bath-house was one of the two places to which a good wife could go on her own (the other being, not unexpectedly, the church). Even then, a visit to a bath-house should only take place when the woman needed to take care of her hygienic needs – as opposed to socialising or enjoying other pleasures offered by the baths.[179]

In an entirely different context, the baths again appear as a public place in one of the homilies largely devoted to the problem of cruelty towards slaves; admitting that he knows how insolent and impudent slaves can be, Chrysostom warned against excessively harsh treatment of the enslaved: he reminds that the bruises and marks on a slave's body, visible to everyone when she is naked in the bath,[180] are a clear evidence of cruelty of her mistress.[181] The topic of slaves was not an uncommon one and returns a little later, in the already discussed context of a master being followed by his retinue. As a side note, the bishop showed a good deal of pragmatism in his choice of arguments here: he expressed concern only for female slaves (who were more likely to gain sympathy), and points out that when the slave is reprimanded with foul language, the one who is truly shamed by that behaviour is the mistress herself. Likewise, knowing that the female slaves would be at much greater risk of being injured by their mistress rather than the master, he points out that not only is it a shameful thing to hit any woman, regardless of her position, it is even more shameful when it is another woman who beats her. Chrysostom called for moderation in the treatment of those who were at the mercy of their masters, especially if the slave was also a Christian, but in keeping with the times did not oppose the institution of slavery itself.

In a passage to which I have referred earlier discussing nudity in the baths, Chrysostom noticed that everyone was naked there, but it seems that rather than commenting on hypothetical social equality – as previously discussed, this would have been fairly superficial – the preacher's goal was most likely to remind the well-off that for all their wealth their mortal condition was no better than that of the poor.[182] In the same passage, baths are listed as a place where people tend to gather. All of the passages mentioned are very straightforward in their message; for Romans, bathing was, first and foremost, a social activity, an opportunity to interact with and, perhaps, impress each other. The freely accessible, comfortable environment of public baths offered an informal and relaxing setting, superior in that respect to other public places (like theatres or markets – and, of course, churches, where a far greater degree of decorum and solemnity was expected).

An altogether different situation in which a social function of bathing is mentioned comes from the funeral oration written in honour of Basil of Caesarea by Gregory of Nazianzus. Gregory reminisces about his (and

Basil's) youth, and recalls the hazing ritual that accompanied the arrival of new students to Athens.[183] Near the end of the initiation, following a series of more or less harrowing trials, the newly arrived was led to a bath-house, accompanied by other students, and after finally being allowed to enter, was recognised as their equal. The following collective bathing was apparently meant to help the 'freshman' relax, and was a social event as well. The chosen bath-house seems to have been a crucial place for the whole ceremony; whether the aforementioned bathing had some deeper, symbolic meaning, is not stated. Gregory added that Basil himself was spared all this, both in recognition of his great intellect and because of coming from a good family (and thanks to some pleading on Gregory's part).

A notable case of social interaction (or rather, lack thereof) within a bath-house is mentioned by the Church historian Theodoret (ca. 393 – ca. 458), who discusses an interesting case of ostracism which occurred on religious grounds. The events took place in the Syrian city of Samosata, and the account can be treated as an example of how much importance was given to the element of communality in bathing. Following the exile of bishop Eusebius (died ca. 379) by the Emperor Valens in 374 for his resistance to the Arian doctrine, the Arian Eunomius was appointed to the bishopric.[184] Largely ignored by the locals from the moment of his arrival, one day he decided to bathe. Already enjoying the bath and seeing a small gathering outside the bath-house, he invited the bystanders to join him; not only did they not enter, but even those who were in the bath-house when Eunomius arrived avoided him, to the point where they would not share the same pool. Thinking this was out of respect for him, the priest left so that the bathers could continue their routine without his interference. According to Theodoret, however, as soon as the Arian left the building, the pool in which he bathed was emptied, and used again only after refilling. Eventually, having heard of this outright hostility, Eunomius left the city, concluding he would not be able to perform his function there. Theodoret made it clear that, personally, Eunomius was quite approachable and amicable; it was only his religious affiliation that made him so abhorrent to the Samosatenes.[185] I will return to this episode in the following chapter.

Bathing and luxury

The presence of wealth has previously been discussed to some extent; the following passages are going to focus on bath-houses as embodiments of wealth and luxury in their own right, and the implications this had for the Romans. When listing the luxuries present at Macellum in Cappadocia, where the future Emperor Julian (361–363) and his brother Gallus (Caesar under Constantius II in 351–354) were sent away after they were spared from the massacre that left Constantius II (337–361) as the sole ruler of the Empire, Sozomen mentioned that the place was quite magnificent, and included baths, gardens and fountains.[186] The text describing Macellum serves as an

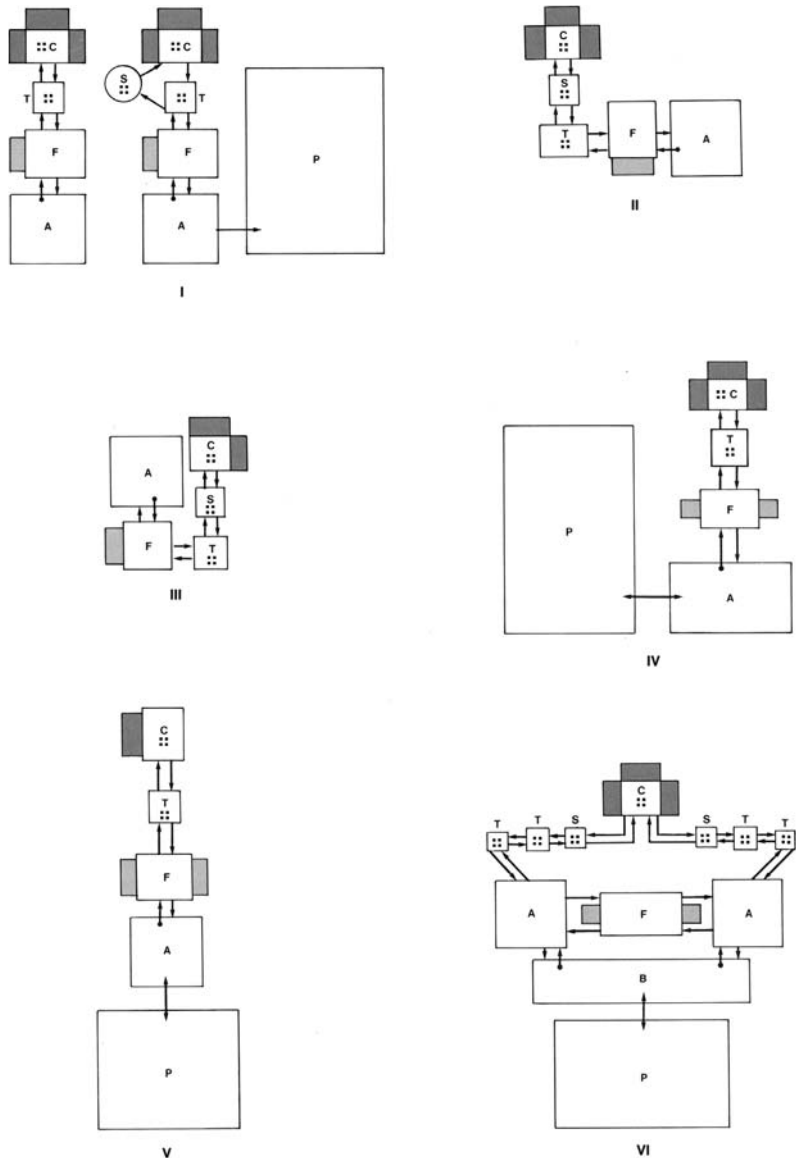

Fig. 1.3 Bath types and sub-types: I axial row type; II angular row type; III parallel row type; IV axial symmetrical row type; V axial half-symmetrical row type; VI double symmetrical row type. Bath-houses of these types (as well as those represented in Fig. 3), while still prevalent at the onset of the period discussed here, were gradually abandoned in favour of much simpler and compact bath-houses consisting of multiple bath-tubs. Reproduced by kind permission of Inge Nielsen, author of *Thermae et balnea. The architecture and cultural history of Roman public baths*, and Aarhus University Press.

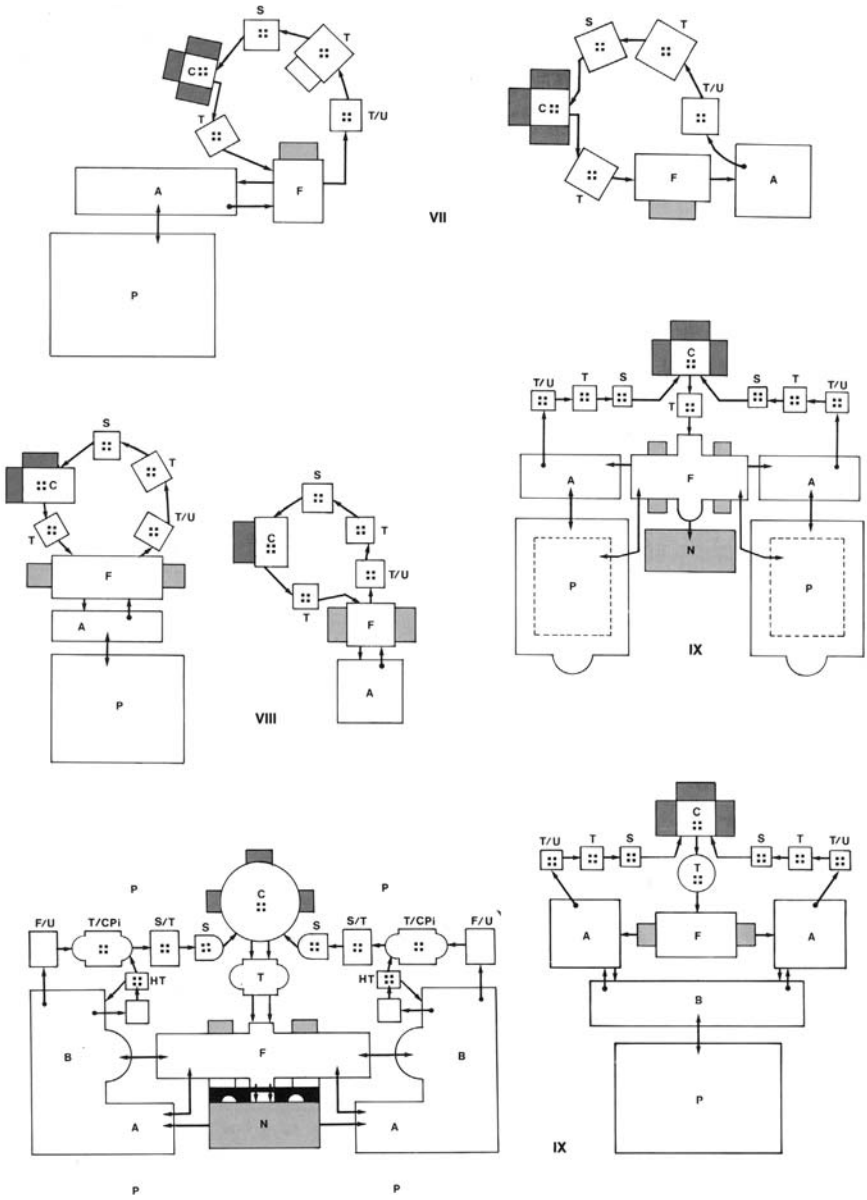

Fig. 1.4 Bath types and sub-type: VII simple ring type; VIII half-axial ring type; IX imperial type. Reproduced by kind permission of Inge Nielsen, author of *Thermae et balnea. The architecture and cultural history of Roman public baths*, and Aarhus University Press.

illustration of the seemingly excellent conditions in which the future Emperor was being raised, which provides a good contrast with his later actions, heavily criticised throughout the fifth book. The baths themselves are listed as first of the splendid amenities and luxuries, perhaps indicating their importance.

Gregory of Nazianzus, while criticising the love of luxury among Constantinopolitans, focused his attention on the great baths of Zeuxippus.[187] While mentioning that he himself does not frequent the establishment, he makes it clear that his own home town lacked such splendid amenities, and that they are distracting his listeners too much from pursuits more worthwhile than bathing.[188] Criticising the splendour, Gregory did not express any criticism of bathing itself.

Chrysostom had a lot to say about the luxuries that accompanied bathing: in a particular example, a rich man is contrasted with one suffering from poverty: the rich man enjoys fine clothes, good food, overall well-being – and baths. The poor one, in comparison, is hungry and destitute. While it was not uncommon for the poor to be able to go to the baths, especially when they were sponsored and the entry was free, the rhetoric used obviously cannot mention this, though the wealthy could afford to use more lavish baths, while using more expensive cosmetics and having more attendants.[189]

A fairly common trope employed by Chrysostom in criticising the excesses of the wealthy was to contrast them with the simple life of the poor, and point out how the poor person was, in fact, better off than the rich one. Poverty meant an easier path to salvation, one with far fewer obstacles; in such comparisons, descriptions of the luxurious bath-houses (along with other possessions, and activities)[190] serve to underline the difference between the poor and the rich. Not criticising bathing or bath-houses themselves, the preacher's rhetoric makes it clear that at least some of the aforementioned establishments were decidedly luxurious.

In one of the homilies on the letter to Ephesians, Chrysostom states that he would be happy to see people renounce all worldly luxuries – but does not expect them to do so, and allows them to freely use the baths, take good care of the body, have servants, eat and drink well and enjoy the world in general, as long as it is all done in moderation.[191] This is yet another case when baths are mentioned as the first among the worldly things his listeners enjoyed, and among the luxuries; and another example of Chrysostom's pragmatism and moderation in setting out guidelines for his flock.

Another archetypal rich man finds himself owning huge tracts of land, many houses and, among the other assets signifying great wealth, baths. All this temporal wealth is rejected by Chrysostom as worthless in the face of the man's inability to enter Heaven; but in the list of earthly possessions, the baths come right after the houses, and before the slaves, indicating their significance.[192]

The baths, together with other edifices, are mentioned as being able to preserve the name of the man who built them (and, as was discussed earlier in this chapter, this assertion is strongly grounded in reality); but according

to the preacher, this is hardly worthwhile – more so if the man in question committed evil deeds: the building would then serve only as a reminder of his crimes, or, in the best case, of the hardships he has suffered. Furthermore, the building could later be used by the man's enemies.[193]

Chrysostom mentioned that some of the wealthier landlords provided the people with baths and markets, but failed to erect churches and, while they were making donations for the poor in the city, they would have done better to financially aid those who would care for the souls in the countryside. In the same passage, Chrysostom, somewhat surprisingly perhaps, criticises landowners for providing their farm workers with too many luxuries: among these, the baths are denounced for making people softer and less able to work hard.[194] A similar if differently aimed remark appears elsewhere: in condemning the manner in which the wealthy spend their money on splendiferous and vain investments, instead of helping the poor, Chrysostom includes among the selfish expenses the building of baths.[195] An obvious example of extravagance in building of a bath-house was lavish decoration; floor and wall mosaics, statues and expensive materials used in their construction significantly inflated the total cost of the structure. The character of decoration could vary greatly, from simple to exquisite, from purely ornamental to semi-religious. While the mosaics and wall paintings might perhaps sometimes hint at the character of the establishment (like in the case of the rather explicit paintings found in the *apodyterium* of the Terme Suburbane in Pompeii),[196] quite often it is impossible to decisively establish the reasons for the particular choice of the ornaments – the Hunting Baths from Lepcis Magna are a good example of this; whether the owner was supplying animals for the arena, or whether the bath-house belonged to some hunting association,[197] or whether the choice for the motif had nothing to do with the profession of the person who chose it during the redecoration will not become clear unless additional evidence is found. Even in the case of the Suburban Baths the exact function of the erotic pictures is unclear – were they a "catalogue" of services offered at the establishment, or simply a decoration?[198] Because of their unique nature, the exact interpretation of the pictures is impossible, though L. Jacobelli considers them to have served as reminders of where the customers have left their clothes. Were similar ornaments present in other bath-houses? Quite possibly, but without the exceptional circumstances that occurred in Pompeii, they by and large succumbed to the passage of time; during the times of the late Empire, depictions of similar scenes, if they were still present, would have likely become less common due to Christian morality, influenced more and more by the ascetic ideals. Nonetheless, they constitute a stark example of the association between bathing and sexuality; the exact nature of this association remains however, at least for the time being, unclear.

One of Chrysostom's homilies provides an example showing that bath-houses could have been profitable investments: an avaricious man, travelling through land, is unable to stop himself from counting revenues arising from many different places, among them the baths.[199] Setting the context aside, it is

clear that at least some of the bath-houses were regarded as highly profitable, while remaining expensive to build and maintain.

Romans were not alone in their liking of luxury: Procopius described the Vandals as a nation living in a highly extravagant manner – he starts the list by mentioning that all the Vandals enjoyed bathing on a daily basis (this began when they conquered Libya from the Romans).[200] They also liked to eat the sweetest and best things, wore silk and gold clothes, and spent time indulging in various pleasures. The picture emerging from Procopius' text seems to indicate that not only did the Vandals fully embrace the Roman lifestyle (and many elements of Roman culture) after taking North Africa, but that they even surpassed the Romans in extravagance. J. H. W. G. Liebeschuetz noted how the damage done by Vandals during the capture of Carthage (439) was in large part repaired. The circus and the amphitheatre were still functioning, the Green and Blue factions still provided mimes and charioteers for the games; the poet Luxorius recited at the Baths of Gargilius. The baths of Antoninus were in decay, however, similarly to the abandoned basilica on Byrsa hill.[201] Nonetheless, many of the elements of Roman culture remained present.

Another instance where bathing is listed by Procopius among luxuries appears in book eight and involves, again, the Huns: Sandil, king of the Utigurs (Utrigurs), one of the Hunnic tribes, urged Justinian to expel the Cutigurs (Kutrigurs), another tribe who were defeated by the Utigurs on behalf of the Romans, from his lands.[202] When the Utigurs were defeated, "tens of thousands" of Byzantine slaves, whom they had previously captured, escaped; at the same time, about two thousand Cutigur warriors, with their families, fled and sought refuge on Byzantine soil. Justinian allowed them to settle in Thrace. This caused Sandil a good deal of grief – since the enemies he and his people fought against, on the Byzantines' behalf, could now, thanks to the same Byzantines, enjoy much better living conditions than the loyal allies. Among the luxuries Sandil was convinced the Cutigurs now had available were gold-embroidered clothes and baths; Justinian sent back the Utigur delegation having made numerous vague promises, but ultimately did not address the issue raised by the allied Huns.

Given the number of scandalous remarks about Theodora that can be found in the S*ecret history*, the one describing the bathing habits of the Empress is relatively mild: the fragment mentions that she took caring for her body to an excess (though still not to such a degree as she would have wanted, since this was simply impossible to achieve). Among other things, she entered the bath very early in the morning, and left it very late.[203] While this indicates a significant excess compared to the usual practice, the criticism does not seem particularly venomous – yet, the author's focus on Theodora's obsession with her physical beauty would have elicited a negative response from contemporary readers. One could speculate whether the bath mentioned would have been the – adjacent and connected to the palace – Zeuxippus. Had that been the case, and if the assertions about the different bathing times for men and

women were justified, it would be possible to read more into this remark. Was Procopius trying to imply that the Empress was spending so much time in baths not only to care for her beauty but also to draw gazes of male bathers to it? It is hard to tell; there is nothing that would imply this directly, and given Procopius' bluntness in many other parts of the *Secret history*, such circuitous hints and allusions in this particular section of his work would be somewhat surprising. Justinian's laws did not regulate bathing hours and the regulations concerning bathing early in the day, issued centuries earlier (and by no means necessarily still followed), designated early hours of the day as the time when the sick were to have their baths and could undergo their treatment. Was that another barb hidden in this passage, implying there was something unwholesome about the Empress that made her bathe early in the day? While not particularly likely, perhaps the possibility should not be dismissed entirely.

Bathing in the absence of proper amenities

I have previously discussed the Riot of Statues, a notable example of a situation in which the standard bathing facilities were not available, which in turn forced would-be bathers to resort to using a river. While the examples of bathing in a natural environment are rare, I believe they deserve a separate section – if only because of their unusual character. Furthermore, the desire to bathe even when suitable facilities were unavailable is telling in itself, and can be interpreted as further evidence of the otherwise ubiquitous character of Roman bathing. There is at least one other notable example of the use of an improvised bathing site, provided by Sidonius Apollinaris, who recorded one of the most interesting accounts of bathing outside of a proper bathing establishment. In a letter written near Nemausus (modern Nîmes) sometime in the 460s, during a journey on which he spent some time in an inn between the estates of his friends, Sidonius described how, upon realising that both of the baths that his friends had were out of service (due to ongoing construction, or perhaps repairs), he ordered his servants to dig a sizeable hole near a stream, had it covered with a roof of wattled hazel, and had it further covered with *cilicium* (a crude cloth made of goat hair). When water was thrown on the red-hot stones that were placed in the hole, Sidonius and his friend were able to enjoy the chit-chat and beneficial effects of a steam-bath simultaneously. The stay in the makeshift *sudatorium* was concluded with bathing in the hot water, and followed by a quick application of cold water.[204] It is easy notice that the physical effect achieved by such bathing was quite similar to the one produced by "proper" baths: Sidonius even mentions the feeling of weakness he and his companion experienced after the prolonged stay in the hot and humid environment – which, as in a bath-house, was removed by rapid cooling of the body. The recreation of bath-house conditions in the natural setting seems to indicate a deeper need for at least a partially 'Roman' bathing environment. It might also indicate, as J. Percival had suggested,[205] the continual worsening of living conditions in 5th-century Gaul. The political

and economic decline in the West affected also the sphere of culture, and perhaps the return to nature was even more forced and not nearly as welcome as Sidonius would have liked us to believe. The description of the construction process might suggest that Sidonius already had some experience in constructing such makeshift baths; it cannot be ruled out that similar arrangements were made on other occasions. Still, another letter dating from the same period describes the idyllic estate Sidonius acquired as his wife's dowry: almost half of the letter is devoted to describing the rather spacious, judging from the description, bath-house located there, complete with all the key elements, including the hypocaust; the building itself, however, had few decorations.[206] While these examples come from the Western part of the Empire, they highlight the general importance of funding for the functioning of the proper bath-houses (in case of Sidonius' bath, his forest, located very close to the bath-house, supplied the fuel). It is quite possible that both of Sidonius' friends had more important expenses and could not afford to repair their baths; still, at least Sidonius himself had fared quite well (or, at least, was putting much effort into creating such an image).

Inappropriate or unusual uses of baths

Certain aspects of bath-houses, such as their size, infrastructure or fame, occasionally caused them to be used in ways for which they were not originally designed. In this section I am discussing several such uses, making note of the possible implications of such situations.

Sometime during the year 365, Anastasian Baths of Constantinople served as temporary quarters for two legions, *Divitenses* and Younger Tungricani (*Tungricanosque Iuniores*); Procopius, cousin of the late Emperor Julian, gained their support for his usurpation against Valens (365–366).[207] The baths were certainly spacious enough for that purpose; a lack of more detailed remarks makes it impossible to determine just how comfortable the facility was as a temporary barracks, whether it continued to operate in its intended function, or what the reaction of the soldiers (or, indeed, the local citizens) might have been to this arrangement.

Recalling Job's plight, Chrysostom reminded his listeners that there were none poorer than that Old Testament character; the preacher mentioned the homeless, who in their extreme poverty spend their nights in the baths. Still, he continued, at least these wretches had one ragged piece of cloth and a roofed shelter, while Job had none of these things.[208] Liebeschuetz mentioned a bath-house in Thessalonica that, after falling into disuse, was used as a shelter.[209] The use of baths as a haven by the poor is quite thought-provoking; it is difficult, however, to say exactly for how long they would be able to stay there each night, as the opening hours would vary according to season, and Chrysostom does not specify which particular baths were most commonly used by the homeless for spending the night. Since the public bath-houses were free to use and remained comfortably warm for a long time after the

last customers left, they would have been ideal places in which the poor could spend the night, as baths, especially the public ones, rarely remained open after dark. It is less likely that the smaller, private bath-houses would have been used for that purpose, although it cannot be ruled out altogether – this would have likely depended on the charitability of their owners.

Procopius reported how the praetorian prefect during the 532–541 period, John the Cappadocian, wanting to save money on preparing the rations for soldiers, ordered the dough to be baked in a public bath-house (baths of Achilles) instead of a proper bakery. The bread fell apart back into flour and rotted; about 500 men are reported to have died because of the poisoning caused by consumption of the spoiled food (this took place in 533 AD).[210] This clearly indicates that while it was possible to use the bath-house furnaces for baking bread, the result was much inferior to preparing bread in proper bakeries. While food preparation did occur in bath-houses (not uncommonly, at that), there is nothing to indicate that it was intended for any other use than immediate consumption.

Finally, an interesting account from Theophanes, demonstrating how commonplace bath-houses were in the popular consciousness: relating Tiberius II Constantines's (574–582) ascent to the throne as Augustus from the position of Caesar in 578, the chronicler writes that the circus factions wanted to know the name of their new Augusta. In reply to the request, Tiberius announced that her name is the same as that of the church opposite the baths of Dagistheos; that is, Anastasia.[211] Theophanes does not say why Tiberius chose such a roundabout way of replying to the crowd, but apparently it was transparent enough for those gathered.

Death, accidents and mishaps while bathing

Examining only the previous parts of the chapter, one might conclude that the Roman bath-houses were, for the most part, idyllic places; to some extent it would be true – after all, their appeal to an average Roman was undeniable. In the following passages, however, I examine some events indicating that the carefree atmosphere usually enjoyed by the bathers was, on rare occasions, brutally disturbed.

An account of the circumstances of the death of Fausta, wife of Constantine, is provided in Zosimus's *New history* (following the account of Eunapius):[212] Constantine is said to have locked her in an overheated bath, and by killing her this way, "comforted" his mother after killing his son from the earlier marriage, Crispus, on the suspicion that he had intercourse with Fausta).[213] Zosimus attributes Constantine's adoption of Christianity to seeking forgiveness for the killings (and other crimes) since, he claims, priests of other cults denied the Emperor the possibility of purification for such heinous crimes. This rumour must have been rather widespread, as Sozomen found it necessary to dismiss it long before Zosimus' work was even written, pointing out that many of the pro-Christian edicts were issued even before Crispus'

death.[214] Still, Zosimus' narrative makes it clear that it was possible to turn bathing facilities into lethally hot death-traps.

Bathing also proved to be the undoing of a group of Germanic raiders who were caught by surprise by Jovianus, a cavalry commander, sometime during 365–366; they were too distracted by bathing and did not take any precautions against a possible attack.[215] While their surroundings were far from the sumptuous and lazy atmosphere of the Roman baths – the Germanic soldiers bathed in a river – they were nonetheless caught badly unprepared, likely naked and unarmed; the vulnerability caused by bathing was effectively exploited by Jovianus.

In similar circumstances a poorly organised Roman expedition into Persian territory met its end during the summer of 503 AD. After defeating a detachment of Persian troops, a part of the Roman forces, led by Areobindus (fl. 460–512), unaware of the presence of the rest of the hostile army under the command of the 46-year-old king Cabades (Kavadh I – 488–531), began to feel more at ease and abandoned some of the usual precautions. Many of the soldiers went to a nearby stream to wash the meat they were to consume, and some decided to bathe in it as well, to cool themselves. The Persian commander, having already learned about the defeat of his vanguard, noticed that the nearby brook had become muddy and concluded that not only were the Romans very near, but that they also must be unprepared for battle. He immediately launched an attack, which surprised the Romans, most of whom were eating at the time. As Procopius relates, the outcome was a complete disaster for the Roman army.[216] In seeking respite from the heat of the afternoon, the bathing soldiers ensured the utter defeat of their own forces. This example, again, shows well that if one wants to enjoy bathing in a natural environment, time and place ought to be carefully considered. It should be noted that the account of bathing in the stream can hardly be described as typical: it serves to explain the defeat of a Roman army during a military campaign. Aquatic activities do not feature prominently in Procopius' texts, and when they are finally mentioned, it is purely due to external factors, rather than because the act of washing occurred. Keeping this in mind, it would be logical to assume that, even when they lacked baths, soldiers did wash themselves when it was possible, and that it would have been a common practice for them to use springs or rivers for that purpose when on campaigns – the relative lack of other accounts of such washing, in all probability, is caused by the mundane and common character of the activity.

Theodoret mentioned another death that occurred in a bath: after threatening the monk Aphraates, or Aphrahat (whose supposed bold speech to the Emperor Theodoret quotes), Valens' chamberlain went to prepare a bath for the Emperor; there, as Theodoret relates, the man lost his senses and stepped into the still boiling-hot water, and died; the man's death was attributed by Theodoret to Aphraates' prayers and he wrote that Valens was aware of the monk's power – yet it only made him even more stubborn in his support of the Arian doctrine.[217] This story, while not very reliable, does highlight some of the risks involving bathing; it was clearly possible for some baths

to be devoid of safety measures that would prevent such deaths as the one described. The hot water was supposed to be mixed with cold water before bathing could begin. Assuming that Theodoret related an actual occurrence, the text makes it possible to speculate that the chamberlain may have suffered from heat stroke after entering the room and stumbled into the hot water. Experiencing an overheated bath must not have been uncommon, since such an occurrence is used as an example in Chrysostom's the *Exhortation to Theodore after his fall.*[218] John implores Theodore to think of the eternal and incessant suffering in the fires of hell whenever he finds himself in an overheated bath (or whenever he is suffering from a fever). It is interesting that the first thing mentioned as the one that might resemble being in the river of flames was being in an excessively warm bath-house; the fever – perhaps surprisingly – only second.

Another example of a death attributed to supernatural causes is to be found in Basil of Caesarea's homily on the Forty Martyrs of Sebaste, martyred as a result of Licinius' (308–324) persecutions in 320.[219] Left to freeze to death unless they rejected their faith, the Christian soldiers bravely endured the cold; however, one soldier broke down and ran to the hot bath-house, readied to tempt those being martyred, and died immediately after entering it;[220] the most probable rational cause of death is thermal shock. This account of martyrdom may be seen as having a different meaning from the most straightforward: the death for the faith is presented, as is usual in such a text, as the greatest good. While a direct opposite of what would be accepted by the readers or listeners as normal, the story uses the contrast to emphasise its message. Thus, by knowing the purpose of the presented paradox, it is possible to extract from this account yet further evidence suggesting that a cultured way of bathing, in proper surroundings, was, under normal conditions, preferred to bathing in an environment that lacked the suitable amenities.

Procopius related the events which led to enmity between Uraïas (a Goth commander during the war of 535–540, who was offered, but refused, the position of king of the Goths) and Ildibad (who became the king, 540–541), and which started in a bath-house.[221] The wife of Uraïas came to the bath-house in splendid garments and with numerous attendants (not unlike a wealthy Roman woman would; although it would be difficult to speculate whether she was directly inspired by the Roman behaviour, or whether the social dynamic in Gothic bath-houses was similar to that of their neighbours for other reasons). The wife of Ildibad, on the other hand, was modestly dressed, as her husband, who only recently had become a king, had not yet become wealthy. She was insulted by Uraïas' wife, as she lacked retinue and wealth fitting her status, and later incited her husband to seek revenge for the disrespect. Ildibad heeded his wife, and Uraïas was killed – because of his wife's arrogance, if we were to believe Procopius; at first the commander was accused of plans to desert to the Byzantines, and as this plot failed, he was assassinated. Ildibad himself was killed not long afterwards, with his death attributed in no small part to the unjust killing of the popular Uraïas.

Theophanes related a different case, of a sudden death in a bath-house itself: "A certain Olympios, an Arian, who was washing in the baths of Helenianai palace, died miserably in the pool after uttering terrible blasphemies. This was depicted on an image."[222] Theophanes continued that the image showing Olympius' death was later removed by one Eutychianus, who was bribed by the Arians to perform the deed, but who soon afterwards died himself, as his body wasted away. While yet another example of religious propaganda that should be treated with perhaps more than just a pinch of salt, the account is likely to have had inspiration in some, subsequently appropriately embellished, event. A stroke caused by strong emotions in a well-heated room would have been a plausible enough occurrence, however, and such an event would have likely been observed by a considerable number of people (and, in this case, later used in religious polemic). Finally, the death of Constans II (who was already mentioned in the context of his visit in Rome in 663, and who was assassinated in Syracuse in 668 by his own *praepositus*) happened while the Emperor was bathing as well; the killing would have had little chance to fail, as it was made easy by both the defencelessness of the monarch and the killer's easy access to his person.

Kidnapping and arrests made at baths were also known. The capture of Paul, the first Patriarch of Constantinople of this name (elected in 337, died ca. 350), is discussed in detail in the following chapter; Theophanes related a later event of a similar nature. Marcian's (fl. 469–484) victory over Emperor Zeno's (474–491) forces (in 479) was nullified by *magister* Illos' swift action – the bribing most of Marcian's forces when the Emperor stopped to dine and retired for the night. Marcian was thus forced to seek refuge in the Church of the Apostles the following day, and was forced to become a priest (which meant he could no longer seek temporal power) before his banishment.[223] What is more interesting here, however, is the fact that his brothers, Procopius and Romulus, were arrested during the night while they were bathing in the bath of Zeuxippus. While they managed to escape afterwards and safely reached Rome, the famous baths proved to be a suitable place for capturing unsuspecting people. The choice of the place for the arrest was excellent – unarmed and unprepared for violence, bathers were an easy target as much in antiquity as in the later centuries.[224] Incidents such as this are a stark reminder that the presence of a loyal retinue in a bath-house could prove essential for more than just a display of wealth and status.

Conclusions

Throughout the period of Late Antiquity, bathing remained one of the most important (if not the most important) aspect of Roman social life. Significant effort and resources were being used to maintain the bath-houses in good repair and fully operational – although, as time passed, larger investments became something that, with few exceptions, only the imperial treasury could manage. Increasing centralisation (at least in part the result of diminishing

local funding) meant that even in some of the larger cities keeping the traditionally arranged baths open was impossible, as the supply of water by means of aqueducts was diminishing. The unchanging popularity of bathing meant that more cost- and water-efficient bath-tubs, after centuries, returned to the majority of public baths.

With increasing centralisation, patronage became associated more and more exclusively with imperial benefactions; the privilege of naming of public buildings and preservation of one's memory, still highly popular in the late 4th century among private patrons, was becoming increasingly rare from the 5th century onwards. This tendency affected bath-houses the most, as they were frequent recipients of the donations. Baths were also quite vulnerable to political and military disturbances, as the water infrastructure crucial for their functioning was first to be targeted in war, aside from requiring significant resources to remain operational. Upkeep of the bath-houses was occasionally so high that it was possible to erect a new bath-house from only a few years' worth of funding that was previously allocated for the running of bathing establishments. It is therefore not surprising that cost-cutting sometimes became a necessity – abandoning communal bathing altogether, however, was out of the question. At the same time, building and re-building of public structures (first and foremost bath-houses) was considered to be one of the most important activities of the 'good' emperor. The rulers, in turn, had an excellent way in which to express their – motivated by genuine or feigned feelings – generosity towards the people through such patronage, while making efforts to enshrine the gratitude and loyalty of their subjects. Aside from occasionally being useful tools for increasing the popularity of the benefactor who built or paid for the upkeep of the baths, bath-houses could have also been profitable businesses, and as such, were often seen as valuable enterprises. Despite the economic transformations and occasional decline, bathing was one of the few habits (one might say institutions) within Roman society that were being preserved throughout the crises at sometimes considerable cost and effort. Arguably, it was an area of Roman daily life that enjoyed the greatest degree of continuity during Late Antiquity; it certainly attracted great efforts aimed at achieving exactly that, occasionally to the point of preserving the key aspects of the institution even in the lack of infrastructure.

In the popular consciousness of both Romans and outsiders, bathing became a symbol of Romanisation, wealth and luxury. Desire to use Roman or Roman-style facilities might have been motivated by snobbism or seeking pleasure (as in the case of the Huns), sometimes coloured by emulating Roman culture and using its achievements (the Vandals), or by the need to symbolically humiliate the Romans, or prove domination over them (the Persians). Within Roman society bath-houses were, with few exceptions, associated with wealth: as possessions, as places where the rich could publicly show off their precious clothes, ornaments, and numerous slaves and servants, or as establishments where even the less fortunate could experience at least a degree of luxury. At the same time, for the vast majority bathing was seen as

part of a daily routine, at worst a mildly indulgent one, if pushed to an excess. Risking a comparison with modern-day habits, a visit to the baths was a social equivalent of going to the pub after a day's work, except it was even more acceptable to frequent baths on a daily (occasionally more than once a day) basis. The social attitudes towards bathing did not change much during this period; the interplay between Christianity and the Roman bathing culture will be discussed in greater detail in chapter two, but it can be noted here that while certain changes did occur, they were relatively subtle and gradual.

Both nakedness and bathing in mixed company remained commonplace throughout Late Antiquity. With a few specific exceptions, the matter of men and women bathing together was practically unregulated by civil law. Laws of the Church, while objecting to this widespread practice, only begin to prescribe penalties for it from the end of the 8th century – long after the end of the period being discussed here. Nudity itself was not addressed in the laws and remained, undoubtedly, a common sight in bath-houses.

Due to their considerable size, abundance and the associated infrastructure, bath-houses offered a range of potential uses other than bathing. With the lack of other accommodation, they were occasionally used to house troops, or provided shelter for homeless or refugees. The furnaces were also useful for preparing food, but this was normally done only on a small scale.

The relaxed atmosphere of bath-houses was, on rare occasions, disrupted by dramatic events. Accidental deaths were not unheard of, and the vulnerability of bathers was exploited every now and then by assailants, kidnappers or officials seeking to harm or apprehend their targets. Rare enough as they seem to have been, such events did not seem to detract from the general appeal that bath-houses had for the Romans.

Notes

1 I have previously addressed several issues related to bath-house patronage in an article published in a CLIOHres volume: M. J. Zytka, "Power and patronage in the late antique bathing culture", in: C. Bilsel, K. Esmark, N. Kizilÿurek, Ó. Rastarick (eds.), *Constructing cultural identity, representing social power*, Pisa 2010, pp. 117–138.

2 Collected results of a major research project on the water supply system of Constantinople have been collected in J. Crow, J. Bardill, R. Bayliss, *The water supply. . . .* A succinct but now somewhat obsolete description of the system can be found in C. Mango, "The water supply of Constantinople", in: C. Mango, G. Dagron (eds.), *Constantinople and its hinterland. Papers from the Twenty-seventh Spring Symposium of Byzantine Studies, Oxford, April 1993*, Aldershot 1995, pp. 9–18. A description of the water supply can also be found in F. Yegül's *Bathing in the Roman world*, pp. 97–100. As for the siege itself, see J. D. Howard-Johnston, "The siege of Constantinople in 626", in: *Constantinople and its hinterland . . .*, pp. 131–142. Some interesting papers (including a reprint of the one mentioned above) on the military of the Eastern Roman Empire during this period can be found in J. D. Howard-Johnston (ed.), *East Rome, Sasanian Persia and the end of antiquity*, Aldershot 2006.

3 Probably the most well known is the Basilica cistern mentioned by Procopius, *Buildings*, transl. H. B. Dewing, London, Cambridge, MA 1940, 1, 11, 10–15.
4 Frontinus, *On the water supply in the city of Rome*, in: H. B. Evans (ed.), *Water distribution in Ancient Rome. The evidence of Frontinus*, Michigan 1997.
5 Vitruvius Pollio, *The ten books*. . . .
6 Frontinus, *On the water supply* . . ., 78.3–86.
7 A. O. Koloski-Ostrow, "Water as symbol of wealth? An overview of the Roman evidence", in: A. O. Koloski-Ostrow (ed.), *Water use and hydraulics in the Roman city*, Dubuque, IA 2001, p. 8; Ch. Bruun, "Imperial water pipes in Roman cities", in: *Water use and hydraulics* . . ., p. 52.
8 Vitruvius, *The ten books* . . ., 8.6.2. Frontinus does not mention if this arrangement was used in his day.
9 A. Wilson, "Urban water storages, distribution and usage in Roman North Africa", in: *Water use and hydraulics* . . ., p. 83.
10 Frontinus, *On the water supply* . . ., 25.1. One *quinaria* equalled 5/4 of a digit, therefore the diameter of *quinaria* was roughly 2.3 cm.
11 Frontinus, *On the water supply* . . ., 103.2.
12 Frontinus, *On the water supply* . . ., 87.
13 H. B. Evans, *Water distribution* . . ., p. 56.
14 P. J. Aicher, *Guide to the aqueducts of ancient Rome*, Wauconda, IL 1995, p. 22; H. B. Evans, *Water distribution* . . ., p. 54; A. O. Koloski-Ostrow, *Water as symbol of wealth* . . ., p. 1; C. Bruun, "Imperial water pipes . . .", p. 52.
15 A. Wilson, "Urban water storages . . .", p. 83.
16 G. C. M. Jansen, "Water pipe system in the houses of Pompeii. Distribution and use", in: *Water use and hydraulics* . . ., pp. 27–40.
17 This and other problems with aqueducts were shortly summarised by E. J. Owens in the initial part of his article "The Kremna Aqueduct and water supply in Roman cities", *Greece and Rome*, vol. 38, no. 1, 1991, pp. 41–42.
18 P. J. Aicher, *Guide to the aqueducts* . . ., p. 26.
19 P. J. Aicher, *Guide to the aqueducts* . . ., pp. 5–6.
20 P. J. Aicher, *Guide to the aqueducts* . . ., p. 26.
21 Vitruvius, *The ten books* . . ., 8.6; Frontinus, *On the water supply* . . ., 5–23; P. J. Aicher, Guide to the aqueducts . . ., pp. 7–17.
22 N. de Haan, "Si aquae copia patiatur: Pompeian private baths and the use of water", in: *Water use and hydraulics* . . ., p. 42.
23 A. T. Hodge, *Roman aqueducts and water supply*, London 1992.
24 I. Nielsen, *Thermae et balnea* . . ., p. 23.
25 I. Nielsen, *Thermae et balnea* . . ., p. 23. The author uses the term *noria* to describe the device (later another one was built alongside the first), but the description suggests that it was a 'Persian water wheel', a type of pump, consisting of a chain with a series of containers, like amphorae or pots, attached to it and which could be powered by treadmills or windlasses; a *noria*, on the other hand, is a type of water wheel used for obtaining mechanical power; the pumps in Stabian baths were clearly powered by a treadmill.
26 For example, *Codex Theodosianus* (later: *CTh*), XV, 2, 1 (330 CE); *CTh*, XV, 1, 23 (384 CE); *CTh*, VI, 4, 29 (396 CE); *Codex Iustinianus*, XII, 3, 2.
27 *CTh*, XV, 2, 24 (381–382 CE); *CI*, XI, 43 (439–441 CE).
28 J. H. W. G. Liebeschuetz, *Decline and fall* . . ., p. 30.
29 J. H. W. G. Liebeschuetz, *Decline and fall* . . ., p. 30.
30 N. Zajac, "The thermae: a policy of public health or personal legitimation?", in: *Roman baths and bathing* . . ., p. 100.
31 H. Drerup, "Architerkturals Symbol", *Gymnasium*, vol. 73, 1966, pp. 181–196.

32 Ammianus Marcellinus, *Roman history* (further referred to as *Res gestae*), 16, 10, 14.
33 C. Edwards, *Writing Rome: textual approaches to the city*, Cambridge 1996, p. 97. E. Burton, writing in the 1820s, was appalled by the amount of funds drowned by the emperors in the construction of the *thermae* and interpreted this passage as Ammianus' complaint about the excessive spending on the relatively unimportant – in the American historian's opinion – structures (E. Burton, *A description of the antiquities and other curiosities of Rome*, London 1828, p. 302).
34 G. Alföldy, "Urban life, inscriptions, and mentality in late antique Rome", in: T. S. Burns, J. W. Eadie (eds.), *Urban centres and rural contexts in late antiquity*, East Lansing, MI 2001, pp. 11–12.
35 "*ὁ προσωνυμία Κωνσταντιάναι*" (called *Konstantianai*). Socrates Scholasticus, *Historia ecclesiastica*, 4, 8. This information is most likely repeated after Ammianus Marcellinus, *Res gestae*, transl. J. C. Rolfe, Cambridge, MA 1982–1986, 31, 1, 4.
36 J. H. W. G. Liebeschuetz, *Decline and fall* . . ., p. 34.
37 *The Chronicle of Theophanes Confessor. Byzantine and Near Eastern history AD 284–813*, transl. C. Mango, R. Scott, Oxford 1997 (later: Theophanes, *Chronographia*), AM 5860 (367/368).
38 Procopius, *The secret history with related texts*, transl. and ed. A. Kaldellis, Indianapolis, Cambridge 2010.
39 Procopius, *The secret history*, 26.24.
40 Theophanes, *Chronographia*, 237, 239, AM 6055 (562/3).
41 Procopius, *The secret history*, 26. 24.
42 Theophanes, *Chronographia*, 239, AM 6055 (562/3).
43 A. Cameron, *Procopius and the sixth century*, London 1985, p. 12.
44 A. Cameron, *Procopius* . . ., p. 16.
45 A. Cameron, *Procopius* . . ., pp. 8–9.
46 C. Gates, *Ancient cities. The archaeology of urban life in the Ancient Near East and Egypt, Greece and Rome*, London, New York 2003, p. 349.
47 T. W. Potter, "Towns and territories in southern Etruria", in: J. Rich, A. Wallace-Hadrill (eds.), *City and country in the ancient world*, London, New York 1994, p. 203.
48 B. Ward-Perkins, "Specialized production and exchange", in: *Late antiquity: empire and successors, A.D. 425–600*, Cambridge 2000, p. 355; *idem*, *The fall of Rome* . . ., Oxford 2005, p. 42. In both of the cited works, Ward-Perkins stresses the role of the specialisation of various regions in the economic decline – as trade was becoming disrupted by the invasions and faltering commercial infrastructure, centres of production had no way of exchanging goods and making profit, which led to their downfall – the economic situations in many regions became even worse than before the Roman period (B. Ward-Perkins, *The fall* . . ., p. 136).
49 Sidonius Apollinaris, *Poems and letters*, transl. W. B. Anderson, London, Cambridge, MA 1965, 2, 2.
50 J. H. W. G. Liebeschuetz, *Decline and fall* . . ., p. 39.
51 J. Crow, J. Bardill, R. Bayliss, *The water supply*. . . .
52 A. Kompa, M. J. Leszka, K. Marinow (eds.), *Konstantynopol. Nowy Rzym. Miasto i ludzie w okresie wczesnobizantyjskim*, Warsaw 2011.
53 R. Davis (ed.), *The book of pontiffs (liber pontificalis): the ancient biographies of the first ninety Roman bishops to AD 715*, Liverpool 1989, 62.5, 91.2.
54 R. Coates-Stephens, "The walls and aqueducts of Rome in the early Middle Ages, AD500–1000", *Journal of Roman Studies*, vol. 88, 1998, pp. 177–178; *idem*, "The water-supply of Rome from Late Antiquity to the Early Middle Ages", *Acta ad archaeologiam et artium historiam pertinentia*, vol. 17, 2003, p. 168.

55 R. Coates-Stephens, "The water-supply of Rome . . .", pp. 168–169.
56 R. Davis (ed.), *The book of pontiffs* . . ., 78.2.
57 R. Coates-Stephens, "The water-supply of Rome . . .", p. 173.
58 R. Coates-Stephens, "The water-supply of Rome . . .", p. 184. Coates-Stephens notes here that the evidence from *Liber pontificalis* provides hardly any information of a technical nature.
59 C. Bouras, "Aspects of the Byzantine city, eighth-fifteenth centuries", in: *The economic history of Byzantium*, A. E. Laiou (ed.), vol. 2, Washington, DC 2002, pp. 525–526.
60 A. P. Kazhdan, A. W. Epstein, *Change in Byzantine culture in the eleventh and twelfth centuries*, Oakland, CA 1985, p. 2.
61 A. P. Kazhdan, A. W. Epstein, *Change in Byzantine* . . ., pp. 79–80.
62 Ammianus Marcellinus, *Res gestae*, 22, 12, 17.
63 C. Gates, *Ancient cities* . . ., p. 348.
64 Procopius, *History of the wars*, transl. H. B. Dewing, London, New York 1914–1926, 5, 19, 27. Later: Procopius, *History*.
65 Procopius, *History*, 6, 9, 2ff.
66 Procopius, *History*, 5, 8–10.
67 Procopius, *History*, 5, 19, 21ff. Since the Goths tried to destroy the water wheel by throwing debris into the river, Belisarius ordered iron chains to be spread across the river, thus both securing the power source for the mills and preventing the Goths from invading the city by the river.
68 Procopius, *History*, 6, 27, 1ff. Auximus – modern day Ancorna.
69 Procopius, *History*, 6, 27, 21.
70 Procopius, *History*, 4, 1, 2. Gelimer, after cutting the city's water supply, did not attempt to besiege the city.
71 Procopius, *History*, 8, 12, 20.
72 Malalas, *The chronicle of John Malalas*, transl. E. Jeffreys, M. Jeffreys, R. Scott, Melbourne 1986 (later: Malalas, *Chronographia*), p. 188.
73 Malalas, *Chronographia*, 13, 40.
74 Sozomen, *Historia ecclesiastica*, 4, 16. The earthquake is said to have been foreseen in a vision by the monk Arsacius; Sozomen goes into some detail describing both the monk's efforts to warn the city and the fire itself.
75 Ammianus Marcellinus, *Res gestae*, 17, 7.
76 Socrates Scholasticus, *Historia ecclesiastica*, 7, 39.
77 R. Janin (ed.), *Constantinople byzantine. Développement urbain et repertoire topographique*, Paris 1964, p. 216.
78 Procopius, *History*, 1, 24. Geoffrey Greatrex analyses the uprising and the damage in his article "The Nika riot: a reappraisal", *The Journal of Hellenic Studies*, vol. 117, 1997, pp. 60–86. One of his conclusions was that, since the sources do not contradict each other, they should be treated as describing damage sustained by the city during subsequent stages of the riot; a chronological reconstruction of the order of these events is also provided.
79 Malalas, *Chronographia*, 18, 71.
80 Theophanes, *Chronographia*, 184, AM 6024 (531/2).
81 R. Janin, *Constantinople byzantine* . . ., p. 219.
82 *Chronicon paschale 284–628 AD*, transl. M. and M. Whitby, Liverpool 1989, 622.
83 M. Jeffreys, "Bury, Malalas and the Nika Riot" in: P. Allen, E. Jeffreys (eds.), *The sixth century. End or beginning,* Byzantina Australiensia 10, Brisbane 1996, p. 45.
84 P. Sarris, *Empires of faith. The fall of Rome to the rise of Islam, 500–700*, Oxford 2011, p. 254.
85 W. Müller-Wiener, Wolfgang, *Bildlexikon zur Topographie Istanbuls: Byzantion, Konstantinupolis, Istanbul bis zum Beginn d. 17 Jh*., Tübingen 1997, p. 273.

86 P. Magdalino, "Medieval Constantinople", pp. 1–111, in: *Studies on the history and topography of Byzantine Constantinople,* Burlington, VT, 2007, p. 18.
87 J. H. W. G. Liebeschuetz, *Decline and fall* . . ., p. 11.
88 J. J. Wilkes, "Approaching Roman baths", in: *Roman baths and bathing* . . ., p. 17.
89 W. Treadgold, *A history of the Byzantine state and society*, Stanford, CA 1997.
90 W. Treadgold, *A history* . . ., p. 260.
91 W. Treadgold, *A history* . . ., p. 273.
92 W. Treadgold, *A history* . . ., p. 280.
93 B. Ward-Perkins, *The fall of Rome* . . ., p. 136.
94 J. H. W. G. Liebeschuetz, *Decline and fall* . . ., p. 30.
95 J. H. W. G. Liebeschuetz, *Decline and fall* . . ., p. 99.
96 J. H. W. G. Liebeschuetz, *Decline and fall* . . ., p. 61.
97 J. F. Wilson, *Caesarea Philippi. Banias, the lost city of Pan*, New York, London 2004, p. 112.
98 J. F. Wilson, *Caesarea Philippi* . . ., p. 138.
99 B. Croke, "Malalas, the man and his work", in: E. Jeffreys B. Croke, R. Scott (eds.), *Studies in John Malalas*, Byzantina Australiensia 6, Sydney 1990, pp. 1–25.
100 B. Croke, "Malalas . . .", p. 7. Whenever a major investment was made, Malalas assumed imperial presence in the city; in some cases, he even invented fictitious reasons for it (usually a conflict with Persia).
101 B. Ward-Perkins, "Specialized production . . .", p. 377.
102 Malalas, *Chronographia*, 11, 9.
103 Malalas, *Chronographia*, 11, 30.
104 Malalas, *Chronographia*, 12, 2.
105 Malalas, *Chronographia*, 12, 21.
106 Malalas, *Chronographia*, 12, 21.
107 Malalas, *Chronographia*, 12, 22.
108 Malalas, *Chronographia*, 12, 22.
109 Malalas, *Chronographia*, 12, 38.
110 Malalas, *Chronographia*, 13, 30.
111 J. F. Wilson, *Caesarea Philippi* . . ., p. 41.
112 S. Bassett, *The urban image of the late antique Constantinople*, Cambridge 2004. A. Kaldellis, while underlining the importance of S. Bassett's work, pointed out its potential weakness in attempting to interpret Christodorus' work too literally and provided a commentary focused on the literary aspect of the *ekphrasis*. A. Kaldellis, "Christodoros on the statues of the Zeuxippus baths: a new reading of the *Ekphrasis*", *Greek, Roman, and Byzantine Studies*, vol. 47, 2007, pp. 361–383.
113 Malalas, *Chronographia*, 13, 8. Repeated in *Chronicon paschale*, 529.
114 N. Zajac, "The thermae . . .", p. 103. This observation here refers to Rome, but is equally applicable to the 'second Rome', Constantinople.
115 Socrates Scholasticus, *Historia ecclesiastica*, 4, 9; Sozomen, *Historia ecclesiastica*, 6, 9; Theophanes, *Chronographia*, 57, AM 5860 (367/8). The commentary to Theophanes (p. 89n) mentions that Zosimus' *New history*, transl. R. T. Ridley, Sydney 2004, 5, 9, 3 supports the chronicler's version of the etymology of the baths, but the passage in question does not refer either to the baths, nor to the aqueduct.
116 Ammianus Marcellinus, *Res gestae*, 26, 6, 14; this passage is also mentioned in the commentary referred to in the previous footnote.
117 John Chrysostom, *In Joannem (homiliae 1–88)*, 65, 3.
118 Procopius, *History*, 1, 13.
119 Malalas, *Chronographia,* 14, 12.
120 Malalas, *Chronographia*, 14, 20.

121 Malalas, *Chronographia*, 14, 29.
122 Theophanes, *Chronographia*, 115, AM 5959 (466/7).
123 Malalas, *Chronographia*, 16, 10. Repeated in *Chronicon paschale*, 609.
124 Malalas, *Chronographia*, 16, 21.
125 Malalas, *Chronographia*, 17, 19.
126 Malalas, *Chronographia*, 18, 2.
127 J. H. W. G. Liebeschuetz, *Decline and fall* . . ., p. 49.
128 Malalas, *Chronographia*, 18, 17.
129 Malalas, *Chronographia*, 18, 118.
130 Procopius, *Buildings*, 5, 3. In earlier period, this place of healing was associated with Apollo; Christians linked it with Archangel Michael – which shows how important the spring was; it was not only used for medical purposes, but also had a religious importance. The place is also mentioned in J. Lefort, "Les communications entre Constantinople et la Bithynie", in: *Constantinople and its hinterland* . . ., pp. 207–218.
131 J.-M. Spieser, *Urban and religious spaces in Late Antiquity and early Byzantium*, Aldershot 2001, chapt. 3, p. 9.
132 J.-M. Spieser, *Urban and religious spaces* . . ., chapt. 2, p. 328.
133 Libanius, *Orations*, 22.2–7.
134 John Chrysostom, *Ad Populum Antiochenum (homiliae 1–21)*, 14, 15.
135 John Chrysostom, *Ad Populum Antiochenum (homiliae 1–21)*, 14, 15.
136 John Chrysostom, *Ad Populum Antiochenum (homiliae 1–21)*, 18, 13.
137 Procopius, *History*, 5, 19.
138 Procopius, *History*, 2, 11.
139 Procopius, *History*, 1, 13, 17; 1, 14, 12.
140 Procopius, *History*, 1, 13, 31ff.
141 Procopius, *History*, 2, 14. This took place after Chosroes conquered Antioch on the Orontes in 538.
142 A. Kaldellis, *Procopius of Caesarea. Tyranny, history, and philosophy at the end of Antiquity*, Philadelphia 2004, p. 127, A. Cameron, *Procopius* . . ., pp. 163–165.
143 A. Cameron, *Procopius* . . ., pp. 163–165.
144 Priscus, *Fragmenta*, in: C. W. Muller (ed.), *Fragmenta historiorum graecorum*, vol. 4, Paris 1851, f. 8.
145 John Chrysostom, *In Matthaeum (homiliae 1–90)*, 81, 4. The argument goes on to explain that those full of vice are not ashamed of their evil ways when they are in company of others like them; should they appear among those "clothed with virtue", they would immediately be out of place and feel shame. That said, there is no indication that the nudity itself is sinful in any way. The comparison focuses on being 'one of the crowd'; it does not link nudity with vice.
146 John Chrysostom, *In epistulam i ad Timotheum (homiliae 1–18)*, 2.
147 F. Yegül, *Bathing* . . ., pp. 35–37.
148 Martial, 6.42; F. Yegül, *Bathing* . . ., p. 36.
149 G. G. Fagan, *Bathing in public* . . ., pp. 207–208, 213–219.
150 Clement of Alexandria, *Instructor*, in: ANF, vol. 2, ed. A. Roberts, J. Donaldson, 3.47.3.
151 Plutarch, *Moralia*, in: *Plutarch's Moralia, in fifteen volumes*, transl. F. C. Babbit, vol. 4, Cambridge, MA, London 1962, 288A.
152 A. Eger, "Age and male sexuality: 'queer space' in the Roman bath-house?", in: M. Harlow, R. Laurence (eds.), *Age and ageing in the Roman Empire*, Portsmouth, RI 2007, pp. 141, 151.
153 Sozomen, *Historia ecclesiastica*, 7.25.1–7; Theodoret, *Historia ecclesiastica*, 5.17; Malalas, *Chronographia*, 13.43; Theophanes, *Chronographia*, 1.72–3.

154 Socrates Scholasticus, *Historia ecclesiastica*, 4, 31. Justin is said to have been executed by Constantius, after the Emperor interpreted Justin's dream as prophesying that Justin's progeny will attain imperial power.
155 Socrates' text could be read as suggesting that Valentinian legalised bigamy in order to 'not reject' – or possibly 'not divorce' – Severa, while marrying Justina. T. Barnes however concluded that the law actually created the possibility of remarrying after a divorce – T. Barnes, *Representation and reality in Ammianus Marcellinus*, Ithaca, NY, 1998, pp. 123–125.
156 F. Yegül, *Bathing* . . ., pp. 6, 30.
157 F. Yegül, *Bathing* . . ., p. 32.
158 *Historia Augusta*, Hadrian, 18.10. *HA* also contains probably the most often cited anecdote about Hadrian, in which he gifts a poor veteran a number of slaves with means necessary for their upkeep, only to be confronted by a crowd wanting to abuse the Emperor's generosity on his next visit to the baths in which the veteran received the gift (*HA*, 17.5). The factual accuracy of that highly popular story aside, it is a clear example of the trope of a 'good' emperor mingling with his subjects in a bath-house, not to mention his generosity!
159 F. Yegül, *Bathing* . . ., p. 33.
160 F. Yegül, *Bathing* . . ., p. 33.
161 G. G. Fagan, *Bathing in public* . . ., p. 29.
162 F. Yegül, *Bathing* . . ., p. 34.
163 G. G. Fagan, *Bathing in public* . . ., pp. 27–28.
164 R. Bowen-Ward, "Women in Roman baths", *Harvard Theological Review*, vol. 85, no. 2, 1992, pp. 125–147.
165 Novellae J. 117.8 (CIC III: 557–558).
166 Novellae J. 117.14 (542) (CIC III: 564).
167 Ammianus Marcellinus, *Res gestae*, 28, 4, 9.
168 Ammianus Marcellinus, *Res gestae*, 28, 4, 19.
169 John Chrysostom, *In epistulam ad Colossenses (homiliae 1–12)*, 10.
170 John Chrysostom, *In epistulam ad Philippenses (homiliae 1–15)*, 10. Perhaps a reference to the likelihood of losing or damaging the precious ornaments.
171 John Chrysostom, *In epistulam i ad Corinthios (homiliae 1–44)*, 40, 6.
172 John Chrysostom, *In epistulam ad Ephesios (homiliae 1–24)*, 22.
173 G. G. Fagan, "Interpreting the evidence . . .", pp. 30, 34.
174 John Chrysostom, *In Acta apostolorum (homiliae 1–55)*, 30; *In epistulam i ad Corinthios (homiliae 1–44)*, 36, 8; *In epistulam i ad Timotheum (homiliae 1–18)*, 9; *In Acta apostolorum (homiliae 1–55)*, 29.
175 John Chrysostom, *In epistulam ad Romanos (homiliae 1–32)*, 31.
176 Artemidorus, *The interpretation of dreams*, 1.64.
177 John Chrysostom, *In epistulam ii ad Timotheum (homiliae 1–18)*, 14.
178 John Chrysostom, *In Joannem (homiliae 1–88),* 34, 3.
179 John Chrysostom, *In Joannem (homiliae 1–88),* 61, 3.
180 Another example of a casual remark on the nakedness in the baths, without any sign of disapproval of it.
181 John Chrysostom, *In epistulam ad Ephesios (homiliae 1–24)*, 15.
182 John Chrysostom, *In epistulam i ad Timotheum (homiliae 1–18)*, 2.
183 Gregory of Nazianzus, *Funebris oratio in laudem Basilii Magni Caesareae in Cappadocia episcopi (orat. 43), 16*, in: F. Boulenger (ed.), *Discours funèbres en l'honneur de son frère Césaire et de Basile de Césarée*, Paris 1908.
184 Theodoret, *Historia ecclesiastica*, 4, 13.
185 Theodoret, *Historia ecclesiastica*, 4, 13.
186 Sozomen, *Historia ecclesiastica*, 5, 2.
187 Gregory of Nazianzus, *Contra Arianos et de seipso* (orat. 33), 8, MPG 36.

188 Gregory of Nazianzus, *Contra Arianos et de seipso* (orat. 33), 7, MPG 36. The provincial background, despite his education, has caused the Nazianzen enough unpleasant moments that, in rhetorical exaggeration, he refers to it as a crime (for which he apparently continued to suffer).
189 John Chrysostom, *In epistulam i ad Corinthios (homiliae 1–44)*, 11, 10. It should be also remembered that there were usually many baths available in any town or city, and that they varied greatly in size and amenities; unless a poor person was able to find a sponsored bath, he would have to satisfy himself with the cheapest place.
190 John Chrysostom, *In epistulam i ad Thessalonicenses (homiliae 1–11)*, 9.
191 John Chrysostom, *In epistulam ad Ephesios (homiliae 1–24)*, 13.
192 John Chrysostom, *In Matthaeum (homiliae 1–90)*, 63, 4.
193 John Chrysostom, *In Joannem (homiliae 1–88)*, 65, 3.
194 John Chrysostom, *In Acta apostolorum (homiliae 1–55)*, 17.
195 John Chrysostom, *In epistulam ad Romanos (homiliae 1–32)*, 14.
196 L. Jacobelli, *Le pitture erotiche delle Terme Suburbane di Pompei*, Rome 1995.
197 J. J. Wilkes, "Approaching . . .", p. 23; F. Yegül, *Bathing* . . ., p. 36.
198 L. Jacobelli, *Le pitture erotiche* . . ., pp. 60ff.
199 John Chrysostom, *In epistulam i ad Corinthios (homiliae 1–44)*, 23, 8–9.
200 Procopius, *History*, 4, 4, 6–9.
201 J. H. W. G. Liebeschuetz, *Decline and fall* . . ., p. 95.
202 Procopius, *History*, 8, 19.
203 Procopius, *The secret history*, 15.6ff.
204 Sidonius Apollinaris, *Poems and letters*, book II, l. 9, 8–9.
205 J. Percival, "Desperately seeking Sidonius: the realities of life in fifth-century Gaul", *Latomus*, vol. 56, 1977, pp. 284–287. Similar remarks on Sidonius' attempts to draw a veil over impoverishment of Gaul's aristocracy were made by Jill Harries, who noted that the archaeological evidence, although far from complete, show a deepening crisis. J. Harries, *Sidonius Apollinaris and the fall of Rome AD 407–485,* Oxford 1985, pp. 131–133.
206 Sidonius Apollinaris, *Poems and letters*, 2, 2.
207 Ammianus Marcellinus, *Res gestae*, 26, 6, 14.
208 John Chrysostom, *De diabolo tentatore (homiliae 1–3)*, 3, 5.
209 J. H. W. G. Liebeschuetz, *Decline and fall* . . ., p. 131.
210 Procopius, *History*, 3, 13, 16.
211 Theophanes, *Chronographia*, 249, AM 6071 (578/9). The same passage also mentions that the wife of the former emperor, Justin, became greatly disappointed at that point, as she did not know about Tiberius' wife and wanted to marry him to keep her position; rumours claimed she even became Tiberius' lover before Justin's death.
212 C. M. Odahl, *Constantine and the Christian empire*, London, 2004, p. 6.
213 Zosimus, *New history* . . ., 2, 29.
214 Sozomen, *Historia ecclesiastica*, 2, 5. Sozomen also mentions a number of stories in which pagan gods did grant forgiveness even for great crimes – in an attempt to show that if Constantine had indeed been trying to purify himself with the help of Hellenic priests, they would not have refused him. Theophanes' *Chronographia* merely mentions under AM 5816 (323/4 AD) that Constantine's son, Crispus, died a Christian, without even mentioning Fausta, while Socrates and Theodoret do not refer to these events at all.
215 Ammianus Marcellinus, *Res gestae*, 27, 2, 2.
216 Procopius, *History*, 1, 8, 16–17.
217 Theodoret, *Historia ecclesiastica*, 4, 23.
218 John Chrysostom, *Ad Theodorum lapsum (lib. 2)*, 1, 10.

219 Basil of Caesarea, *In quadraginta martyres Sebastenses*. It should be noted that the cult of the Forty Martyrs was very important in Basil's family. Even the family's tomb was located in a shrine dedicated to the Sebastean martyrs; R. Van Dam, *Families and friends in late Roman Cappadocia*, Philadelphia 2003, pp. 16–17. Other accounts of the martyrdom of the forty Christian soldiers include that of Gregory of Nyssa and many later ones. Later authors suggest the martyrs were actually in the water, and not on the frozen surface.
220 Basil of Caesarea, *In quadraginta martyres Sebastenses*.
221 Procopius, *History*, 7, 1, 37.
222 Theophanes, *Chronographia*, 143, AM 5991 (498/9). The commentary on p. 219n traces the source of this information to Theodorus Lector and John Damascene.
223 Theophanes, *Chronographia*, 127, AM 5971 (478/9).
224 To give but one example, a notable case from Polish history: in November 1217, a meeting of Dukes of the then-divided Poland was held in Gąsawa. The Dukes were ambushed one morning while bathing; High Duke Leszek the White fled the bath-house and, still naked, started to flee on horseback, but was caught up with and slain by his pursuers. Another of the Dukes, Henryk, survived the attacked only thanks to the sacrifice of one of his knights, Peregrinus, who was struck a mortal blow while protecting the Duke. The theme of vulnerability related to bathing is not a purely historical issue, either; in a modern reader's mind perhaps a more familiar image of a vulnerable bather could be evoked by a mention of the Alfred Hitchcock 1960 movie *Psycho*.

2 Baths, bathing and religion

Introduction

In this chapter, I examine bathing from the perspective of religious, primarily Christian, attitudes. Ecclesiastic sources, such as homilies and other works offering instruction to the faithful, contain numerous remarks on everyday life, and I have already made some use of them in the preceding chapter; here, I wish to focus specifically on the relationship between bathing and religious matters. The first question to be examined is baptism and the associations between the baptismal font and bathing in both the linguistic and conceptual sense. Subsequently, I examine martyrdoms, miracles and healing associated with water and bathing, along with a brief overview of Christian attitudes to medicine; this subject, however, is discussed in greater detail in chapter three. Subsequently, a look at encounters and social interactions in bath-houses that involved ecclesiastic figures and the role they played in some Church-related events follows. Afterwards, I examine the attitudes of some of the influential Church authors towards baths and bathing, as these were seen as potentially risky from the perspective of spiritual well-being. The theme of risks and appropriateness of Christian involvement with bath-houses is subsequently further explored in the context of wealth, luxury and self-indulgence, with a glimpse at Church canons relating to bathing. The next theme to be explored is that of various popular beliefs and superstitions associated with the baths. The chapter is concluded by a brief overview of bathing in the Jewish community of the time.

From the moment the new religion, Christianity, began to gain followers in the Roman Empire, its adherents found themselves in a difficult situation. Serious arguments were raised against Christians taking up service in the military and holding public offices, as both came with the necessity of performing, or participating in, sacrifices to pagan deities, as well as participating in violence or ordering executions – both deemed at the time incompatible with Christian beliefs. Furthermore, Christians separated themselves from the wider society also by refusing to partake of sacrificial foods, not participating in public festivities, avoiding many of the public entertainments (all of which were seen as tainted by false religion, or simply immoral) and keeping their

own religious rites secret. On the other hand, as I am going to demonstrate, there can be little doubt as to whether bathing, in general, was acceptable; even a cursory glance at the Christian sources shows that bathing was not considered inherently tied to any objectionable activities, and was seen as a necessity of everyday life for all, with a notable exception of those practising the most radical forms of asceticism. Nonetheless, bathing was treated with a dose of caution, and much of this chapter is going to be devoted to an in-depth examination of Christian attitudes to this activity.

Sermons are among the more interesting sources for learning about the everyday life and habits of the people to whom they were addressed. They provide an immense wealth of information about activities, concerns and desires of Christian people, occasionally also providing small glimpses into the world of those following other religions. That said, one has to approach such sources with considerable caution, as more often than not, they present the priest's opinions and world view, rather than those commonly held by his congregation (and, by extension, people who determined the actual everyday social norms). This problem is widely recognised;[1] in addition, the audience would have been composed only of Christians, and thus the issues discussed in the sermons were tailored to the needs (as they were seen by the priest) of that part of society. For the purpose of this study, however, this concern is somewhat less relevant, as the study focuses on the changes that were occurring during Late Antiquity, in no small part brought by the ascendant Christianity which already began to dominate the social discourse. These changes, while sweeping in some areas of life, such as, most conspicuously, religious practices and, to a lesser extent, the greatly increased respect for lifelong virginity and relegation of marriage to an inferior (yet still vastly more popular) alternative to a virtuous, unmarried life, have been relatively small elsewhere. Public life, the military and most social norms changed only slightly because of Christianity, or were only beginning to change – except for the most devout who chose to follow a more ascetic lifestyle. Attitudes to bathing, on which I will be focusing, appear to have changed very little; Christian preachers and moralists, for the greater part, simply repeated the already well-known warnings of the pre-Christian moralists and gave the same advice that was already present before the advent of Christianity, if from a somewhat different perspective. The minor changes in the tone of the arguments and the Christian overtones did little to alter the core message of moderation and avoiding of excesses, already voiced by the earlier philosophers. Furthermore, the fact that preachers felt the need to repeat their advice time and again seems to indicate that the everyday behaviour of the churchgoers in Late Antiquity was in many ways not much different from that of the members of the earlier, pagan society.

Analysing Christian attitudes towards, among others, city life (on the example of Antioch – as I have indicated before, a very useful location for conducting a case study), I. Sandwell has made some interesting observations which I have found particularly suitable for providing a general background

to this chapter.[2] Drawing heavily from the teachings of John Chrysostom, the author concluded that Christianity (from the 4th, and certainly 5th centuries) attempted to govern all facets of life – which, in Antioch, at least, was made more difficult by the existence of a vibrant Jewish community which offered a way of life that was in many ways attractive to Christians. Christianity was present throughout the city – shrines, churches and festivals made it visible. Chrysostom, however, wanted more – a full transformation of the city into a Christian one, filled with people sharing its values. Promotion of asceticism, charity and greater respect for the clergy, along with dismissing many aspects of the old civic life (such as non-Christian festivals, or euergetism expressing itself through construction of public buildings, aimed at gaining temporal renown), became common themes in Christian preaching. This is consistent with observations that D. S. Wallace-Hadrill made a few decades earlier – Christianity advised reducing all of the bodily needs to a bare minimum and focusing efforts on prayer and spirituality instead.[3] Bodily cleanliness, likewise, was of little importance – the state of the earthly shell did not matter, at least not as much as cleansing the soul of sin. Finally, Christians should not be seeking honour; *philotimia*, the love of honour and recognition within one's community, was rejected in favour of humility.

Such transformation was occurring slowly, and not without some resistance from those Christians who still held the old values in high regard. The most obvious example that can be mentioned here is that of the Emperor Julian; later nicknamed the Apostate for his eventual renunciation of Christian faith and for his activity aimed at restoring paganism. The author Zosimus can be mentioned here as well. Gradually, however, the influence of Christianity was making itself felt more and more. The words 'bathing' and 'washing', for example, gained an additional meaning: they entered the Christian dictionary as synonyms of baptism and more generally (and not so originally) of spiritual cleansing. This led to a veritable flood of comparisons, similes and references to everyday bathing customs and practices in the didactic texts and homilies, primarily those that were used to better explain to the lay audiences the nature and importance of baptism.

Baptism

Church fathers, when mentioning washing, bath and cleansing, usually refer to the baptismal font and the removal of sins. Typical phrases mention "font that cleans off the sins"[4] or "purity obtained through the font".[5] Again, the words relating to water – washing, font – that are being used here could, in a different context, refer to an entirely mundane activity. It is worth noting at the very beginning, however, that John Chrysostom, while mentioning bathing on numerous (and greatly varied) occasions, made it clear that earthly bathing, while good and beneficial, is always inferior to spiritual cleansing. This attitude is universal throughout the texts of the Church authors, and remains a constant.

In his speech on baptism, Gregory of Nazianzus rather straightforwardly explains why the baptism is called, among other things, a bath: "because it washes".[6] The font is said there to give the power to resist temptations,[7] and thus the Nazianzen urges his listeners not to postpone baptismal cleansing.[8] Gregory, in a rather obvious fashion, alludes to the then still fairly widespread practice of delaying baptism in order to preserve the unique opportunity to remove all of one's sins until such a time that the baptised person would simply not have much further opportunity to sin – either because of greater spiritual development, but more commonly due to old age or, in some cases, imminent death.[9] Gregory argued that even before the baptism people should live a good life, since, unlike sins, good deeds will not be washed away by the rite.[10] It is not difficult to imagine that one who already lived a relatively good life before the baptism would have also found it easier to adopt a lifestyle appropriate for a Christian after the rite. The font offers cleaning of both soul and body, and the purity obtained this way was deemed by Gregory to be far greater than any cleanliness available to those who adhered to the Law of Moses.[11] Another similar example, made by John Chrysostom, features also the Jewish laver: this ritual washing is set far above the ordinary bathing as well – but was still considered to be far below the cleansing that comes from "God's grace" through baptism.[12]

The bathing metaphor is further explored by Chrysostom: when compared to the spiritual "bathing", cleansing of the soul offered by the Church, ordinary bathing is always presented as the inferior one; it is cleansing merely of the bodily dirt, while the other one purifies the soul.[13] While it is hardly a surprising comparison, it marks the actual baths as the most common – and the most obvious to the listeners – place of washing and cleaning of the bodies. Seeking to bring into the minds of his flock the idea of cleaning oneself, Chrysostom relied on the image that would have been the most familiar to his listeners, omitting such possibilities as washing by the river; a good indicator of how commonplace and easy to access the baths were – at least in major cities.

The baptismal font could have had, however, an opposite, "blackening", effect, Gregory rhetorically asserted, when the baptism is administered by the heretics – in particular, Arians. The religious controversy started by Arius (who claimed that the Son and Father in Trinity did not share the same substance, and that the Son was inferior to Father, both contrary to the orthodox view of the majority of the Church) was one of the main reasons for the first Council of the Church (in Nicaea in 325), but, despite its condemnation by the majority of the bishops gathered there, it remained influential, and received support from several emperors throughout the 4th century. Gregory judged that those who accepted baptism from the adherents of the Arian controversy were being "cheated" of their salvation.[14] This is because accepting the baptism from Arians meant – in his view – also accepting their version of faith. The rite itself was deemed a "real" baptism, but accepting the "false belief" immediately pushed the newly created Christian away from God. The

salvation that comes through the uncorrupted font was, in turn, likened to the earth and air in its abundance.[15]

Chrysostom again used bathing as a metaphor, for baptism and the regeneration it offers, in the commentary to the letter to the Galatians,[16] where he was recalling both the crucifixion and the restoration of fertility by God to Sarah, wife of Abraham. As God allowed the previously barren Sarah to bear a child, so will the baptism and the words of the priest bring about new life and freedom, the preacher assured his listeners.

C. Markschies[17] remarked that texts indicating that baptism was being associated with rebirth came from as early as the 2nd century; however, baptism was also, if indirectly, linked with death.[18] This can be traced back to the first letter to the Romans;[19] baptism in Christ means baptism in his death as well, and being "buried" with Christ in such a way will enable being raised from the dead. Immersion in the baptismal pool was therefore symbolic of entering the grave with Jesus – and, in turn, being able to walk out of it again. Entering the sacred water symbolised burying of the 'old' man and rebirth of the 'new' one.[20]

Moving away from the religious texts, it is possible to find more direct evidence of the importance of baptism among the laity. Certainly, it was important enough for Procopius to mention it when he was describing the attempt on the life of the commander of auxiliaries, Solomon (died in 544), who was residing in Carthage at the time of Justinian's edict forbidding the baptism of Arians (who included the Vandal soldiers employed by the Romans).[21] The law itself is given as a secondary reason for the plot (and the general mutiny, in 536); he cited as the foremost reason the question of ownership of the conquered Vandal lands – many of the soldiers having married Vandal women, and, encouraged by their wives, claimed the Vandal land as their own through marriage, while the Emperor claimed it for himself (while allowing the soldiers to keep slaves and valuables). While the text suggests that the edict concerning baptism alone would not have been enough to cause the mutiny, it may have triggered the events that followed. The fact that the historian considered it at least a major reason for the rebellion goes to show how seriously the matter was treated at the time.

Procopius mentioned another event in which baptism played a crucial role: Areobindus, at the time the main Byzantine commander in North Africa, sought refuge in a church after an undecided skirmish between his men and those won over by another high-ranking officer, Gontharis (Guntharic), who was plotting to seize power for himself. Areobindus left the church only when the bishop of Carthage, Reparatus, sent by Gontharis as messenger, performed on a child the rite of 'sacred bath' – "το θείον λουτρών ιερουργήσας" (*to theion loutron hierourgesas*), and swore by the act that Areobindus would be safe.[22] Only then did Areobindus go with the priest to Gontharis, together with the baptised child. Despite his promises, and the sacred rite, after a shared dinner Gontharis sent his men to kill Areobindus anyway. It is telling that Areobindus considered the priest's oath, involving the child's baptism,

as a sufficient guarantee of his safety; perhaps it was the best one he could obtain – Procopius did not state whether Reparatus was aware that his oath was going to be made false. Unfortunately, Procopius did not delve more deeply into the exact meaning of the rite and of the oath, either. It would appear that the ceremony was forced upon the bishop, and Areobindus clearly believed that Gontharis would respect its sanctity. Procopius related that Areobindus was not released immediately, and that his murder during the night was committed on Gontharis' orders. The lack of exact wording of the oath, however, allows us to speculate that, perhaps, its letter (though not intent) may have been kept in some fashion. Alternatively, Gontharis either decided that he was not bound by the oath, or did not mean to keep it from the beginning.

The sanctity of baptism was occasionally underlined by references to the superficial and imperfect effects of physical bathing. Such a comparison is made by Chrysostom in another homily, where it is even more strongly accented that the ordinary bathing was far less superior to the spiritual.[23] Here, however, he mentioned a river and a lake as other possible means of washing oneself; alternatives to the bath-house. The act of bathing itself is described as ineffective in washing away anything but the most external, physical, dirt; the spiritual uncleanliness that is displeasing to God can only be cleansed by purifying the soul itself. In a rhetorical manner, Chrysostom assures that if physical washing was indeed capable of removing guilt, he himself would have bathed as much as possible. There is also a direct reference to Jewish ritual washing: it is derided as pointless, the purity it brings imperfect. This was most likely a jab at Judaising Christians and the following of Jewish practices in addition to Christian customs, as at the time the preacher was struggling to prevent those in his pastoral care from adopting some of the traditionally Jewish rituals.[24]

Another excellent example places bathing, alongside dining, as a matter of this world; both of them, writes Chrysostom making a reference to the Ecclesiastes, have their own time. He contrasted these with Christian instruction, to point out that the latter is not limited to a specific time (like washing and eating are), and should be accepted continuously.[25] In a similar vein, as was mentioned in the previous chapter, Chrysostom wanted to convince his listeners that they ought to engage in disputes about topics such as the threat of hell even in places of leisure, such as baths.[26]

The metaphor of bathing returns again in a homily on spiritual purity: similarly to the way in which a person who had just bathed would rather refrain from going to the market, in order to enjoy the relaxing effects and cleanliness of the bath for a longer time, so should people who have just partaken of Holy Communion act with care (in fact, with much greater care than after physically bathing), to not lose the benefits the Communion brings, as the worldly matters and influences are likely to reduce them to nothing.[27] The simile is very straightforward, though not particularly common in this context. More frequently, similar advice would have been offered to the

newly baptised. Communion appears here as a source of cleansing on its own; the extent to which it was actually treated as such by Chrysostom, and how much of the argument was purely rhetorical, however, is a separate issue. Nevertheless, the familiar image of an everyday activity was bound to attract the attention of those present in the church, who were all too often engrossed (as the preacher pointed out time and again) in thoughts about mundane matters instead of paying attention to the preacher's words.

Chrysostom refers to the baths again in a homily on the first letter to the Corinthians, stigmatising the various sins, among which fornication is used as the foremost example. He discusses how people who commit other sins do not feel the immediate need to cleanse themselves, and do not go into the baths after, for example, extortion; but they immediately do so after intercourse with a prostitute. Chrysostom ascribes this urge to clean oneself to the strong consciousness of the sin committed.[28] The Antiochene, however, then points out that the physical nature of the sin does not make it worse than the others; or rather, the other sins, like extortion, are not any less serious or damning for the lack of physical contact. This is an important indicator of the lack of obsession with sins of the flesh, so pronounced in the later period, especially in the West; it helps to explain why there was relatively little suspicion (as far as morality was concerned) surrounding communal bathing at the time. The preacher skilfully avoided addressing the issue of the actual physical need for washing one's body after engaging in intercourse, preferring to direct the attention to the nature of sin in general rather than focusing on particular issues. Indeed, two centuries later and much further to the West, Gregory the Great, discussing in a letter to Augustine of Canterbury the appropriate conduct of a couple after intercourse, remarked that for a very long time it had been customary among the Romans for both the husband and the wife to bathe (and that the couple would not enter a church for a time afterwards).[29]

In a somewhat similar manner, bathing is used as an example of everyday activities, along with eating and walking, when Chrysostom reminds his listeners of the ever-present Tempter; in no way, however, does he suggest here that the bathing presented any additional risk of sinning greater than the one presented by the other activities; the bishop continued to say that even at the time of sleep people are in danger, as their dreams are used by the devil to awaken unclean passions. Bathing is not mentioned here again.[30]

It should be noted that abstaining from bathing, like in the case of the famous 3rd- and 4th-century ascetic Anthony,[31] was considered by many a good way of doing penitence: along with fasting and prayers, denying oneself the pleasures of bathing was often used in an attempt to gain forgiveness for sins.[32] Rejection of bathing should therefore be seen as a voluntary abstaining from a good and – generally – beneficial activity, for the sake of practising self-perfection and as a sacrifice made for the sake of a greater good. Here, like in the other sources, no link is made between bathing and any morally suspicious activities. Such decisions of sacrificing a good, but not an essential,

thing in the pursuit of perfecting oneself, after all, were not uncommon, and quite separate from rejecting inherently sinful activities.

The Christian belief in the power of baptism did not go unnoticed by its critics; it was mocked by Julian the Apostate in his speech *Against the Galileans*, likely inspired by the works of Porphyry and Celsus.[33] Unfortunately, the work is known only from the lengthy quotations preserved in the work of Cyril of Alexandria, which is itself incomplete. The Emperor opened his argument against baptism by addressing remarks from the first letter to the Corinthians, in which Paul addressed his listeners, pointing out that many of them were sinners and wrongdoers – but they had all been cleansed by baptism.[34] Julian argued that there was no observable effect of baptism on physical ailments; how could it, then, be thought to have the power to wash away sins, the much more serious afflictions of the soul?[35]

Martyrdom, miracles and healing

In his first oration against Julian,[36] Gregory of Nazianzus wrote that martyrs have been cleansed by the blood rather than by the (baptismal) font, referring to the fact that many of the martyrs died before they were baptised; in their case, the martyrdom was deemed to have served the same purpose.[37] Baptism by blood is elsewhere explained by reminding the listeners of the water and blood that flowed from the crucified Christ's side.[38] The rhetorical value of such comparisons is not to be underestimated; the vivid image of washing one's body in one's own blood that the preacher was evoking would not have gone unnoticed by the gathered laity. Addressing the question of whether the martyrs were true Christians despite not being properly baptised with a firm 'yes', Gregory would – in all likelihood – have managed to get the crowd's attention.

A somewhat different example of 'bathing' linked to martyrdom can be found in one of Basil of Caesarea's texts, the homily on the Forty Martyrs of Sebaste[39] (said to have been martyred during Licinius' persecutions in 320), already briefly discussed in the previous chapter. Basil described how one of the Christian soldiers, who were forced to stay on a frozen pond for refusing to make a sacrifice to a pagan deity, finally broke down and ran to the nearby bath that was prepared for the specific purpose of luring the Christians away from the pond (doing so would mean giving in to the demands of the persecutors); but upon entering it, the soldier immediately died.[40] While, read from a purely medical perspective, the description could indicate a thermal shock resulting from the sudden change of temperature of the environment, the nature and purpose of the work make it difficult to ascertain whether Basil himself was aware of the likely causes of the man's death. Perhaps he was simply relating the story as it was passed down; what makes the account particularly interesting is the way in which the bath-house, usually associated with comfort and relaxation, becomes the place of death, physical and immediate (the subject that was discussed in the first chapter), as well as eternal.

It is the freezing (or even frozen) pond that becomes the source of eternal life, within the reach of those determined – and faithful – enough to endure the slow death from hypothermia. The warm and deceivingly pleasant bath not only fails to provide the unrealised martyr with comfort, but kills him as surely as the place of his companions' torment – yet without the benefit of an eternal life to follow. Using to the fullest the everyday experiences associated with a visit to a bath-house and extreme cold, the Cappadocian's retelling of the story of the martyrs makes good use of tragic irony. By reversing and contrasting the familiar images, Basil skilfully managed to get the attention of the readers or listeners by exposing them to a series of apparent paradoxes.

Theophanes related another case (discussed in the previous chapter) of a sudden death in a bath-house: the deaths of Olympius (and later of Eutychianus)[41] appear to have supernatural origins, although it would not be unfeasible to assume that the death of Olympius – who had likely been highly agitated to begin with – might have been the result of the combination of increased blood pressure and the conditions found in the bath-house. Regardless of the actual cause of Olympius' death, the image presented by Theophanes is quite powerful; the familiar environment of a bath-house contrasted with the drama of a blasphemer's death was likely meant to strengthen the resolve of the orthodox, homoousian Christians and assure them of the correctness of their understanding of faith.

The attitudes of Christians to medicine were varied; some interesting notes on the subject have been made by O. Temkin. On the one hand, the body was not important; suffering was a way of becoming closer to God, and it was the immortal soul that was the most important. Such was the general attitude of the ascetics. On the other hand, many Christians had a positive view of the body. In any case, the medical rhetoric was fairly common in ecclesiastic teaching.[42] Ascetic rejection of medical advice in general (and avoiding bathing in particular) can be seen in the example of Anthony's *Life* written by Athanasius; Anthony was said to have sported better health after leading an ascetic life than those who partook of diverse diets and baths.[43] On the other hand, Temkin noted, Macarius accepted physicians as being useful for the ordinary, weaker Christians (and in some cases even for monks); similarly, Diadochus, 5th-century bishop of Photica, argued that as long as the sick put their faith in Christ rather than the doctors, there was nothing wrong with summoning physicians; medicine, he wrote, came into being with human experience. Furthermore, by employing a doctor's help, the ascetics can also protect themselves from vainglory.[44] Finally, the body of a martyr, transformed by the very act of martyrdom, for the believers became imbued with holiness; and the suffering of the martyrs – the sacrifice they have made of their own bodies for the faith and God – were widely believed to have granted their remains supernatural powers; the bones, flesh and even miraculously preserved blood gained the status of relics, and now served as a conduit for divine power.[45] The mere presence of relics and physical contact with them played an important role in the cult of the martyr saints – a few examples will

be discussed later in this chapter, and more attention is devoted to the subject in chapter three.

The attitude to medicine was inseparably tied with the attitude to illness as such. This itself greatly varied already during pagan times – disease was either seen as a natural thing, to be dealt with in a mundane fashion – or as influenced by supernatural factors and requiring aid from the gods. Some even welcomed disease as a means of chastising the weak and imperfect body. A part of D. W. Amundsen's paper traces the impact of these earlier pagan influences on Christian authors, noting that the latter made considerable use of the medical metaphors in their works, and that the physical and spiritual healing were often inseparably intertwined – particularly in the healing sanctuaries of Asclepius; he also noted similarities between some of the Jewish and Christian views on disease.[46] Many of the classical pagan attitudes were adopted and adapted by Christian authors – for example, the value of an illness for building one's character, or the distinction, for example which Basil made, between diseases that arise from physical causes and are suitable to be treated by physicians, and those sent – or allowed – by God, which ought to be endured; notably, the disregard for the flesh and desire to mortify it took on highly extreme forms among some of the ascetics (who in this had likely been influenced by the Gnostic world view).[47] Nonetheless, seeking the physician's help alone, without trusting in God as well, was deemed unwise, as even the efficacy of mundane medicine (such as it was) was ordained by God; conversely, a wise Christian knew when to seek a physician's aid as well. A. Crislip devoted an insightful monograph to the highly varied interpretations of illness specifically among Christian authors. Sometimes disease was seen as a link to the Fall of Adam and Eve, a natural state of mankind, alleviated only by baptism – therefore making its presence among saintly ascetics confusing, if not outright scandalising – and made even stranger by the healing power of the relics of these same saints who suffered from diseases.[48] On other occasions, it was seen as a sign of saintliness, given a deeper meaning and embraced.[49] Explanations for illness ranged from God's anger and a warning to or punishment of sinners, to the natural state after the Fall, to a test to be endured, without any of them being universally accepted. The ascetics could find illness either helpful in pursuing their goal of alienation from the self, and humbling, or distracting and hindering their efforts at seeking spiritual perfection. There is no doubt, however, that caring for the sick was an important task for Christians, and – in particular in monastic communities, but also outside of these – illness of some created an opportunity for others to prove their worth by supporting the sick.[50] The frequent use of medical metaphors and similes by the ecclesiastic authors was also noted.[51]

Sozomen makes a mention of miraculous healings that occurred at a fountain in Nicopolis in Palestine (identified at the time with the biblical Emmaus);[52] these were associated with the place where Jesus and his disciples, according to the Church historian, were supposed to have washed their feet on their journey.[53] The water from the fountain was believed to remove

illness from both men and animals. The spring (or fountain) is not mentioned in Luke's gospel, but its fame appears to have been firmly established by the time Sozomen was writing about it. This would have made it one of the earliest Christian sacred springs, and possibly one of the few made 'holy' by Christian believers rather than pagans. Unfortunately, I have been unable to determine from where the information about Christ washing his feet in that place originated. Nonetheless, the faithful flocking to the fountain in search of healing, who washed themselves with the water they considered blessed, seemed to have no doubt that it was the real thing; it is but one example of Christians seeking both physical health and blessings through washing their bodies. Another place where people ventured in search of healing was the hot springs area in Bithynia, which Procopius mentioned in his *Buildings*: the author describes how Justinian I built the baths there, utilising the natural spring to provide them with hot water. It, too, was considered to have had supernatural powers: while it was originally associated with Apollo (and the Byzantines used it even before the baths were built),[54] Christians linked its apparent healing powers with the Archangel Michael.[55] It was popular among the Byzantines, and was even visited by the Empress Theodora, in 529.[56] Sozomen mentioned that not long before his death, Constantine went to Helenopolis (previously Drepanum) in Bithynia, named so in honour of his mother, the Church historian claims; this has been eloquently disputed by J. Drijvers.[57] The dying Emperor went there to bathe in the mineral springs in an attempt to cure his illness.[58] This, however, was not sufficient, and the Emperor decided to depart for Nicomedia, where he soon died, after receiving baptism. Judging from the description, the hot springs in which Constantine had bathed may very well be the same that drew Justinian's attention nearly two centuries later; this might suggest that Justinian simply extended or renovated older baths, and Procopius, in all likelihood, gave him credit for the entire work.

Sozomen's description of the Emmaus-Nicopolis healings does not make any mention of the possible rational causes that might have brought about the recovery of the afflicted people (and it is safe to assume that at least some did get better, thus justifying and compounding the fame of the healing water). His attribution of the healing properties of the spring to a singular event associated by the locals with the events described in Luke's gospel is direct and unquestioning. Procopius in his account, on the other hand, is much more careful: he only mentions that Justinian renovated the local church of St. Michael (in addition to other construction works in the area), without even mentioning that there might be anything supernatural about the curative properties of the Bithynian hot spring.

The places of supposed miraculous healings were not confined to any particular part of the Empire: at Abu Mina, in Egypt (east of the lake Mareotis) a healing shrine to St. Menas was built sometime during the 4th century. It developed swiftly and acquired, among other facilities and possessions, a bath-house.[59] The place quickly gained fame for the many recoveries

attributed there to the saint. While the healing was not associated here with bathing specifically, inclusion of a bathing facility near the shrine into the complex once again shows the importance of bathing to the sick.

To speak of links between religion and baths without mentioning *The miracles of St. Artemios*[60] would be to make a serious omission; the bath-houses of Constantinople make many appearances in this work, often serving as a background for the saint's healing miracles. The *Miracles* were written most likely between 658 and 668, which we can determine from the references to people and events in the text itself.[61] Artemios served in the army, and was credited with recovering relics of SS. Timothy, Andrew and Luke on behalf of Constantius II, and bringing them to Constantinople. During Julian's reign, he was martyred in 362, the acts that angered the Emperor being interceding on behalf of persecuted Christian priests and desecration of a pagan temple. He survived being placed between two stone slabs (they did not crush the saint as they were meant to), only to be subsequently beheaded; whilst being tortured, Artemios asked God to be granted after death the gift of healing. The saint's relics became interred in the church of St. John Prodromos (the Forerunner, as John the Baptist was sometimes called), and the building appears in several of the described miracles. Artemios became associated with curing diseased male genitalia, in particular assisting those suffering from hernias.[62] Because of this, many of the accounts of his miracles are closely tied to places associated with treatment and healing: the church, hospitals and baths. The saint's coffin that held the relics is itself compared to a spring – sanctified like the river Jordan and carrying blessings: clear, pure and inexhaustible.[63] The imagery here is very straightforward and the author's intention of presenting the saint's tomb as a place of spiritual cleansing (by using words associated with washing and cleansing) is hard to miss. As for the miracles themselves, one of the accounts tells a story of a female keeper of the double bath of Paschentios[64] (the double bath of the hospital in the quarter of Paschentios). Her still-breastfed baby developed a hernia; she wanted to go and wait upon the saint, but could not leave the baths unattended, as she lived only with her husband. 'Divine admonition' resulted in forming of a plan: since she and her husband lived in one of the baths, she prepared a votive lamp there, in the name of St. Artemios. In her sleep, she saw a nobleman from the palace entering the bath in which the lamp was lit; he was wearing a belt and a cloak on entering the bath. He asked whether his towels had arrived and pretended to be angry at his servants who did not bring them. He sat down on one of the benches, and seeing that the woman was distressed, asked about the cause; the woman explained her situation and was comforted by the nobleman, who assured her that the God, through the Saint, would cure the child. He also said that if his servants showed up, the bath attendants should prepare a pleasant bath for him; he also wished good health to the woman's son. When the woman woke up, the child was cured; in the morning, she went to thank God and told everyone on the way to the church about the miracle.[65]

This account seemed important enough to be included whole, albeit in an abbreviated form, in this work. Immediately a number of conclusions can be drawn: firstly, pleading for a saint's intercession, even if in a simple fashion, was quite acceptable on the premises of a bath-house. Secondly, the events that occurred in the woman's dream seem to mirror closely an everyday experience that might have otherwise occurred in one of the city's baths. However, it is difficult to establish how likely (or unlikely) the man's appearance in that particular bath-house would have been, as even the palace from which he would have come is not possible to identify – while it might have been the Deuteron palace, the very nature of the 'dream' narrative makes taking guesses futile.

Another account of a miracle that prominently features bathing is that of Stephen, deacon in the Great Church and *poietes* (composer of acclamations and songs) for the Blues (supporters of the Blue chariot racing team); the account states that the event took place sometime before AD 641 (that is, before the death of Emperor Heraclius – 610–641).[66] He suffered from a rupture of his testicles, which was caused either by shouting acclamations or by lifting weights; the source is not clear on that. As he was ashamed of his problem, he tried to conceal it: he went to the baths at times when they would be empty, so he could bathe in private. The man finally informed his parents of his illness, and was treated with cold cauteries, three times a day, and after three days this was followed by surgery – this is another fine example of how detailed the narrative was, at least in some respects. The young man was apparently cured, but soon the illness returned. He was again bathing in poorly illuminated baths, during noon or the evening hours. He finally resorted to seeking the saint's aid – when there were no people in the church, he rubbed the affected part on the saint's tomb, begging for a cure and declaring that he would forego seeking aid from physicians. Some days later, he went to the Livanon (Libanon) bath, in the quarter of Anthemios, to bathe at dawn, still wishing to avoid being seen. Upon leaving the hot chamber, he discovered that his ailment was finally gone for good.

This account is interesting for many reasons – not only does it indicate a belief in the efficacy of very direct forms of approaching saints for healing, but, what is more relevant here, presents what can be taken for a not uncommon situation – a young man trying to cope with an embarrassing affliction. Giving up bathing was clearly not an option, neither before, nor after the ineffective medical intervention, despite the risk of humiliation in case his condition was noticed. The treatment for the hernia was typical; a brief summary of the procedure goes to indicate that where best human measures had failed, the saint's intervention finally solved the problem. Finally, it was in a bath-house that the saint – it would appear – decided to aid the young man by removing his affliction. The mention of the specific bath-house where the miracle took place further indicates the author's desire to make it something more tangible, and perhaps show the saint's willingness to bestow his blessings regardless of the sufferer's current location. Likewise, it is possible that the bath-house was mentioned to indicate a place where the saint's

intervention had already happened, potentially making it another place where those seeking healing could hope to receive a cure. The account also reinforces the link between bathing and health, sending a message that not only mortal physicians (who, unlike saints, may fail at their task) can make use of baths to restore people to health. As previously indicated, I return to the subject of interaction between religion and medicine in the context of healing in the introduction to chapter three.

I decided to finish the subject of miracles related to bathing, washing and baptism with a reflection on a description from Malalas, commemorating the death of St. Gelasinus (d. 297), who was martyred in Heliopolis in Phoenicia (modern-day Baalbek), during Maximian's reign (285–305, 306–308, 310). Gelasinus was a professional performer, a mime, and during a performance delivered during a pagan festival, he was, in a mockery of Christian faith, thrown into a large bath-tub of warm water; but after he was 'baptised' in such a fashion by another mime, he announced that he experienced a vision of God, and was now a true Christian; the spectators, enraged by this, killed him.[67] The story bears an uncanny resemblance to that of the martyrdom of St. Genesius of Rome, killed in the same circumstances and in the same time period (under Diocletian) in Rome; these martyrdoms have been given considerable attention by R. Webb.[68] They represent the trope of a story, or a *mimesis*, becoming reality, and the performances mocking and ridiculing Christianity appear to have been quite popular at that time. Parodies of Christian rites by performers didn't seem to have been unusual even after the religion became accepted by the state, as well over half a century after the alleged death of the martyr described by Malalas, Gregory of Nazianzus complained about the mockery to which his fellow Christians were – apparently – still subject on stage.[69] The choice of the rite of baptism as a target for mockery is not surprising; to an unaccustomed bystander the apparent incongruity between what looked like part of an everyday activity and the enormous importance attached to baptism by Christians may well have seemed comical. The popularity of the stories about actors and mimes truly accepting the new faith on the stage is not hard to explain, either: for Christians, such stories of miraculous conversions caused by an intended parody of baptism spoke volumes of the power granted by God to the rite.

Encounters and social interaction

As early as the 2nd century, Tertullian remarked on how Christians share with pagans so many of the everyday activities – they eat the same food, dress the same way, participate in crafting, trade and, of course, bathing. While the apologist abhorred many of the pagan customs and rejected certain institutions, bathing was clearly not one of them. Indeed, the main theme of that section was the participation and integration with the pagan community (as far as it was possible for a Christian to do while remaining true to the faith), rather than rejecting it.[70]

In the previous chapter I briefly mentioned that the baths of Zeuxippus played an important role in the final exile of Paul, the orthodox bishop of Constantinople; the event was dated by Theophanes to AM 5849[71] (AD 356–357), though that date is highly unlikely, as the bishop is presumed to have died around 350. That event was notable for a number of reasons: aside from being probably the earliest known account directly referring to the presence of a patriarch in a bath-house, the narrative makes it clear that Zeuxippon was deemed a naturally suitable place for conducting discussions and holding meetings on both secular and ecclesiastical matters. Some additional context should be provided here for the sake of clarity. After the death of the bishop of Constantinople Eusebius (in 341), Paul (the orthodox bishop of Constantinople, between 337–350, with two interruptions) and Macedonius (the Arian bishop from 342–346, then 351–360), were simultaneously elected bishops. Hermogenes, *magister equitum* in 341–342,[72] acting on Constantius's orders to expel Paul, was murdered by an enraged mob (342), which forced the Emperor himself to exile Paul. The enthronement of Macedonius, however, was delayed. Paul, after a visit to Rome, where he obtained support of its bishop (Julius), returned to Constantinople. This time it was the praetorian prefect Philip (who held the office in 344–351) who was ordered to exile Paul, as Constantius was in Antioch at the time. To avoid danger, Philip summoned Paul to the baths of Zeuxippus and, from there, sent him to exile (initially to Thessalonica); Theophanes follows closely the version of Socrates' *Church history*,[73] (which was also repeated by Sozomen[74] in that author's work), though both Socrates and Sozomen state that Paul was led out through the palace, which had a direct connection to the baths, rather than the window, as Theophanes stated. The route through which Paul left the Zeuxippon is, for the purpose of this work, of secondary importance; the significance of the baths in this story is the key in analysing the passage. Philip was well aware that he might share the fate of Hermogenes should he attempt to banish Paul officially, and thus decided to use the neutral territory that the bath-house provided, and lured the bishop inside claiming that he merely wanted to discuss with him some everyday issues. It is difficult to ascertain whether Paul was suspicious of Philip's motives in inviting him to the baths of Zeuxippus – it is likely that he did not, especially since after Hermogenes' death the city was punished by a reduction in the amount of corn it received from the Emperor by half, and the people would, perhaps, have been temporarily more reluctant to engage in violence against imperial officials; this would have made the need for the subterfuge less apparent. Still, the prefect made effective use of the informal setting, and Paul was not given another chance of returning to Constantinople.

During the Easter of 404, the baths of Constantine became the gathering place for supporters of John Chrysostom, as the bishop was forbidden from entering his church as a consequence of his conflict with Aelia Eudoxia, the wife of Emperor Arcadius, whose extravagance he criticised, and who died soon after these events; John's supporters gathered and celebrated Easter in

the spacious baths instead (clearly unfazed by the pagan-themed statuary present there, even on such an occasion).[75] Sozomen provided a detailed account of the events that led to this, as well as of how John's supporters were eventually removed from the bath-house in which they had gathered. In the aftermath of Chrysostom's exile, many of his supporters stopped frequenting public places (like the markets or baths), perhaps fearing for their own safety.[76] One might wonder whether the bishop felt some satisfaction from his Constantinopolitan followers' choice of the gathering place, after his many reprimands to his Antiochene flock for behaving in the church as if they were in a bath-house. The persecution, even though limited, had caused the believers to temporarily convert a social space of a bath-house into a religious one. This is not unparalleled – previously, the shape and form of a basilica had been adopted by Christians for the needs of their religious gatherings; an impromptu conversion of a bathing area is perhaps more surprising, but at the same time underlines both the size and the social role of bath-houses that these establishments fulfilled on a daily basis. As a side note, the persecution also helped to bolster religiosity and devotion of the faithful, driving many to the behaviours that Chrysostom wished to encourage.

The following passages focus on a relatively well-known incident from 467 reported by Malalas – the accusation, process and eventual baptism of Isokasios, who was being suspected of paganism. As a side note, the person of *comes* (a title held by many imperial officials and dignitaries) Iakobos, a physician renowned for his cooling therapies (Malalas mentions), played a prominent part in the described events. Iakobos was said to have been very popular among the senate and with the Emperor for his excellence in medicine and philosophy. In recognition of his talents, a statue of him was set up in the baths of Zeuxippus (sometime during the reign of Leo),[77] joining the impressive collection (briefly described in the previous chapter) of effigies of mythological figures and famous people. He was the one who intervened on behalf of Isokasios, then an ex-quaestor, being accused of following the old religion. Kaldellis noted that he indeed was a "notorious pagan teacher";[78] the *Easter chronicle* describes him as a landowner and an inhabitant of Antioch who held many offices (and performed well in them), and that he was renowned for his intellect; the *Chronicle* also included a somewhat puzzling remark that the arrest came as a result of rioting in Constantinople, but it does not seem to have any bearing on the following events.[79] Iakobos asked for Isokasios to be tried in Constantinople, rather than by a provincial governor. The tribunal met in the baths of Zeuxippus; it appears that the Constantinopolitans present there freed Isokasios and escorted him to Hagia Sophia, where he was instructed and baptised. Acclamations in favour of the Emperor Leo were uttered as Isokasios was being freed, to prevent potential suspicion of an open rebellion from arising. From the scant and partially conflicting source remarks regarding this event (it was also mentioned in the *Easter chronicle*,[80] by Theophanes,[81] John of Nikiu[82] and in the Suda lexicon[83], among others), it is difficult to ascertain what exactly occurred

in the *thermae*, but they do all agree that the Zeuxippus complex did play a part in the events surrounding the judicial process and eventual release of Isokasios. It cannot be ruled out that the events were at least in part orchestrated – although no direct confirmation of that can be found in the sources themselves. One final remark that can be made here is that a few years before the trial, in 464, a great fire swept through Constantinople; whether this had any influence on the location of the ex-quaestor's trial, however, I found impossible to determine. Furthermore, a rather detailed analysis of the trial was made by J. Prostko-Prostyński, who examined the proceedings in order to determine the exact nature of the judicial body that was examining the case. Analysing the sources, he noted that the information offered by the later sources might all have come from either the *Chronicle* of Malalas, or an even earlier source used by all of the authors, including Malalas.[84]

Discussing the information relevant to this study, Prostko-Prostyński related the facts already presented. The praetorian prefect, Pusaios, was in charge of the trial that took place in the baths. After a brief hearing, the accused was freed by the gathered crowd, brought to the 'Great Church', instructed and baptised, and on the next day returned home.[85] According to one theory, the proceedings took place in the forum of Zeuxippus (Augustaion), rather than the baths. Isokasios was to be judged by "συγκλήτος" (*synkletos*), which in Malalas always referred to the whole senate; also, during the second half of the 5th century, officials bearing the rank of *vir illustris* were also judged in front of the senate.[86] What is most relevant here, however, is the discussion on the location of the proceedings. Prostko-Prostyński is firmly convinced that they took place in the baths of Zeuxippus. Crucially, Malalas mentioned the statue of *comes* Iakobos located in the baths of Zeuxippus while discussing the location of the trial. Neither of the two senate buildings was located in Zeuxippus. Malalas mentioned that the people observing the trial were loudly acclaiming Emperor Leo I – the crowds would have been unable to observe the proceedings in any official building. Finally, the baths of Zeuxippus would not have been an unusual place for a trial: in 465 (only a year after the fire mentioned previously!) the *praefect vigilum* Menas was accused of *stuprum* (the term for a serious sexual offence) and was to be judged in another public space – at the Hippodrome, with the Emperor and the people present (although in that case the events got out of hand, and Menas was murdered at the Hippodrome before the verdict could be given).[87]

Christian attitudes towards bath-houses and bathing

In the following section I examine some of the material that has already been partially discussed in the first chapter. Many of the sources written by the various Church figures, while not intended to be used as such, offer a glimpse into their attitudes towards many of the secular activities. Here I will focus primarily on those attitudes and the links between Christianity and bathing. Because of their association with wealth, and the wary attitude of Christians

towards individual wealth, the question of whether Christians could own bath-houses is explored in some detail. Another potentially problematic issue is nakedness, nudity and sharing of the bathing space by members of the opposite sex. A brief passage devoted to this matter appears in F. Yegül's *Bathing in the Roman world*,[88] noting the generally, if cautiously, positive Christian attitude to bathing, tempered by, predominantly, the fear of bathing in mixed company, but also of overindulgence and pleasure seeking. The latter two aspects of bathing also shaped the Christian stance on the activity itself, and are addressed in turn. Subsequently, I devote attention to the perception of baths as places of everyday interaction and activity, and their mundane role in the daily life of the faithful. This is followed by a brief overview of examples of how, near the end of the period discussed in this book, the Church not only accepted bathing, but also integrated it among its good works. I also examine what the Church canons had to say on the subject of bathing.

Chrysostom's remarks on the vanity of trying to preserve one's name have already been discussed in the previous chapter. While discussing the futility (or even undesirability) of erecting public structures simply to commemorate oneself and underlining the importance of subsidising missionary work, Chrysostom markedly refrains from criticising sponsoring of the baths themselves. Certainly, while spending money on other projects would have been more worthwhile, baths themselves are not subject to any criticism.[89] Over time, the wealthy did indeed began to sponsor Christian buildings and institutions more and more – often at the cost of the communal ones; examples of funding include (but are certainly not limited to) mosaics in churches, which occasionally included names of the sponsors, and even the mosaic artist himself.[90] It would appear that while the rich had indeed decided to employ their funds in the service of the Church, their desire to keep their names preserved for posterity did not disappear. Ownership of a bath-house, however, was not necessarily a bad thing; while wealth could be dangerous for the rich, when used for the good of the Church or the Christian community, it was quite acceptable. B. Ward-Perkins noted that, in the *Life of Melania*, the saint gave away her wealth: one of her estates in Thagaste was "larger than the town itself, with a bath-building, many craftsmen (goldsmiths, silversmiths, coppersmiths), and two bishops, one for our own faith, the other for the heretics".[91] In the list of properties and indicators of wealth, a bath-house is mentioned in the first and, quite clearly, it appears as a perfectly acceptable establishment; what might be more surprising is the tolerance extended to the non-orthodox Christians, but that can be explained by Melania's attempts at bringing the light of true faith to them. Such casual remarks are a further indication that abstaining from bathing was something very rare, fit perhaps only for the most radical ascetics. Even for a future saint there was no dishonour in being associated with (or, as in this case, owning) a bath-house – at least as long as that wealth made its way to the Church in the end.

Similarly, the preacher appeared to have no objection to nudity in the baths. While segregation of the sexes seemed to be recommended, and caution was certainly advised when it came to bathing in public, nudity itself was treated, at worst, as an unfortunate necessity. As much as bathing created an opportunity for stirring sinful desires, that, in itself, was not a reason to abstain from bodily cleansing. Lack of shame caused by one's own nudity in a bath-house was something natural to Chrysostom,[92] as well as being something that diminished the differences in social status of the bathers.[93] Nonetheless, in a separate work, Chrysostom does advise against allowing young men (or boys) to bathe with women, and against allowing them to spend time in general among members of the opposite sex.[94]

One of the more comprehensive accounts of Christian attitudes to bathing, however, comes from the much earlier (by approximately two centuries) Clement of Alexandria, and his *Instructor*, and it is notable for its rather strict tone when it comes to the subject of bathing (especially when compared with the general emphasis on moderation rather than asceticism).[95] He lists bathing among various excesses in which people might indulge, but here, the censure is directed at lack of temperance rather than the activity itself.[96] Other behaviours criticised by Clement included using excessively costly items for everyday activities (which included bathing), which he attributed to pride and – in the case of men – to effeminacy (μαλακία – *malakia*).[97] In Clement's understanding, effeminacy and softness among men appear to have amounted to impulsiveness and the desire for luxury, which could be seen, for example, in wearing unnecessarily elaborate clothing, accompanied by the lack of the traditionally masculine virtues, such as endurance and patience. Furthermore, the moralist pointed out that those ostentatious displays of wealth served to seduce women, who – as he writes – had few reservations stopping them from undressing in front of men in their own baths. It is this aspect of bathing that seems to be the one to which Clement objects the most: he warns that by the very fact of being open to both sexes, baths tend to promote promiscuous behaviour. Modesty appears to be washed away there, and even those who do not allow strangers in their baths are still surrounded, and bathed, by their servants, thus allowing lust to be stirred anyway – especially when the slaves are likewise stripping themselves in the baths. Interestingly enough, Origen's teacher contrasts the modern women of his day, willing to undress without shame, with athletes of old, who would – according to him – cover their nudity before the contests.[98] It is hard not to notice that Clement seems to treat women with much more suspicion than men when it comes to potential immodesty, even though the bishop is otherwise willing to treat men and women on an equal footing.[99] The stereotype of a female who can incite lust in men – whether willingly or accidentally – seems to have changed little from Clement's times to later antiquity. Pointing to the baths as a particularly risky area for Christians, without condemning the activity itself, seems to have remained a rather common attitude during the following centuries; for example, writing two

centuries later, Athanasius (ca. 278–373) warned virgins that they should avoid public baths, as washing in such places could be harmful not only to themselves, but primarily to those who would see them naked; he even blamed the biblical Susannah for inadvertently bringing about the downfall of the elders.[100] In the biblical episode, the beautiful young woman was bathing alone in her garden, closed for that purpose; however, two elders, who had previously seen her on a number of occasions, lusted after her. They surprised Susannah in the bath and, both their advances rejected and blackmail ineffective, falsely accused Susannah of adultery. Eventually the young woman was saved by the wise Daniel, and the elders, for their false accusations, were put to death instead. Using this passage as an example of a cautionary tale about the dangers of bathing in public might appear jarring to the modern reader – especially since the elders are described in the passage as wicked and unjust even before the bathing scene occurs, and got no sympathy whatsoever from the Old Testament writer. Nonetheless, the tendency to blame women for the lack of self-control and self-centred attitudes among men sometimes seems as equally strong nowadays as it was in antiquity, in particular in societies where the rights of women have not yet been fully recognised. The alleged problem lay in the lack of segregation in public bath-houses, as mixed bathing remained popular from the early imperial period to at least the end of the 4th century. Some private baths may have been exclusive to one of the sexes.[101] Athanasius' advice appears to be directly related to the one in *Apostolic constitutions* which urges women to bathe separately from men, in moderation and ideally later in the day (when there would be fewer bathers present).[102] Another critical remark on mixed bathing can be found in the *Panarion* of Epiphanius of Salamis (bishop of that city in Cyprus in the late 4th century), a collection of polemical arguments rejecting various views he considered heretical and intended to provide a spiritual 'antidote' or 'medicine box' (hence the work's name) for the faithful. He mentioned there the baths of Gadara (in modern-day Jordan), where people travelled to use the baths for healing, but while the curative properties of the waters used for bathing there are considered to be God's work, Epiphanius warns that the place itself has become one of mortal peril, as members of both sexes bathe there together.[103] The Church canons forbade men and women from bathing together,[104] although perhaps it should be noted that the Laodicean synod which passed them was a local assembly, and thus its decisions might not have had an immediate impact on Christian society as a whole, and were only representative of the general attitudes of the assembled clergy – especially considering the lack of punitive measures for those who would not comply with the restrictions. It was not until the late 7th century that bathing in mixed company became a punishable offence. This could indicate that mixed bathing was still present among Christians, although the fact of repeating a much earlier canon could simply mean it was included for the sake of preserving a rule that was deemed proper, without the rule itself having much relevance to the actual state of affairs. Finally, it

is debatable whether the Council would impose a law with such harsh punishment if the condemned practice was still widespread among the faithful.

The matter of bathing separately aside, Clement also shared his thoughts on why people – including himself – frequented baths: for hygiene, warmth, health and pleasure. He declared outright that bathing for pleasure should be avoided, and that while women can bathe to remain clean and healthy (a sentiment mirrored two centuries later by Chrysostom), men should only bathe when it is necessary for their physical well-being. He rejected warming oneself as a valid reason to bathe (on the grounds that this can be achieved by other means). The Alexandrian repeated the common factual observation that bathing too often led to weakening of the body, even to the point of fainting, and warned that excessive bathing might even prematurely age the body. Comparing the body to iron (which also softens from heat), Clement noted that, like iron, flesh can be tempered with cold. This is followed by practical (and common) lifestyle advice about avoiding bathing after meals or when one is exhausted and using types of bathing appropriate to the bather's temperament and time of year. Finally, the reader is exhorted not to use the help of others while bathing, as the bathing assistants served to promote luxuriousness and created a division between the bathers.[105] After discussing bathing of the body, Clement proceeds to explain how superior to merely bodily cleansing is purifying the soul with the Word of God. Supporting this view with a number of more or less directly relevant biblical quotations, Clement nevertheless accepted that washing of the body is occasionally necessary.[106]

Let us return to the late 4th century. Baths appear at multiple times in Chrysostom's texts when he is reminding his flock that they should not be acting in the church as if they were in a secular place; the church, he wrote, deserves silence and order, as opposed to typically noisy places, such as baths, theatres and markets.[107] In another of his homilies, Chrysostom similarly complains that his listeners are behaving in the church like they would in a bath-house, or in the market: they are chatting, making noise, laughing – while (he claims not entirely convincingly) in all the other churches the faithful remain in a reverent silence.[108] The topic of talkative churchgoers (this time, specifically women) returns in a commentary on the first letter to Timothy, and again the baths, along with the market, appear as the usual place for talking – in fact, Chrysostom claims that the women present in the church talk even more than they usually do in the baths or whilst shopping.[109] It would be interesting to know whether Chrysostom was speaking here from personal experience or merely made use of rhetoric; after all, exaggeration and referring to places and events familiar to his listeners was not uncommon for the preacher. In yet another example the baths are said to be, along with the church or a market, a gathering place. Chrysostom reminded his listeners here that they should not merely frequent the church, like all the other places, but also actively seek the benefits of going there, or their effort will be in vain.[110] In the passages mentioned above, the baths themselves are of little, if any, importance; the stress is instead laid heavily on the proper

attitude towards Christian rites and teachings. The repeated use of bathing and associated behaviours as examples of behaviour inappropriate in a church, however, strongly conveys the image of the Antiochene churchgoers as unruly – and, apparently, bringing their bathing habits into even religious gatherings.

That said, Chrysostom was keen to reverse the situation – one of his homilies brings up a hypothetical situation indicating that discussing religious topics in (for example) a bath-house would have been quite desirable, as such conversation would likely have kept the faithful from wrongdoing.[111] Reminding themselves of how little value there is in transient pleasures with debates on punishments for their sins in the afterlife, the bathing Christians could use even such moments of relaxation to perfect themselves. Such advice was likely aimed at those who desired to involve themselves more deeply in the Christian lifestyle without giving up their everyday pleasures.

The image of Christians enjoying a trip to a bath-house is supported by a fragment of a different homily, where the bath-house is presented as a place where ordinary men (as opposed to the ascetics) hurry after a day's work.[112] The bath, together with the church, is also one of the two places to which a good wife may go – as for the most of the time she ought to be staying at home (this was briefly mentioned in the preceding chapter). The visit to the baths, however, should take place when the woman is in need of bodily cleaning, and not – as might be guessed – when she would merely wish to indulge in the pleasures bathing could offer.[113] This attitude is very similar to that of Clement – it would seem that, as far as the approach to bathing was concerned, not much had changed over the course of nearly two hundred and fifty years. Both authors addressed an audience of 'ordinary' Christians, and tailored their advice accordingly. Outright bans were rare, the emphasis was on moderation; the fact that Clement was writing for Christians who could still face persecutions, while Chrysostom was preaching to the adherents of what by then had effectively become a state religion, seems to have had very little bearing on the teaching pertaining to daily life. If anything, the tone of Chrysostom's rhetoric on the subject of frequenting the bath-house seems to be slightly more relaxed and understanding than that of Clement – perhaps to reach out more to the wealthy and influential Christians (more common now than in Clement's time), without risking alienating them with too harsh words? The form of the teaching is likely to have played a role here: addressing a live audience, Chrysostom had to reflect more on its reactions, and tried to guide and convince rather than simply dictate.

In a different homily, Chrysostom makes use of an allegory: a pregnant woman is going about the town, visiting a bath-house or market, only to be seized by childbirth pangs, and completely unprepared for the oncoming labour. The example is used in an attempt to convince the listeners that they should always be ready for life's end, as that, too, might come unexpectedly.[114] Here, like in many of the earlier examples, a bath-house is one of the places where Christians may find themselves during the course of the day.

It introduces a level of familiarity and leaves the listener more exposed to the unexpected parallel drawn between the unexpected nature of birth – and death.

Theodoret provided an excellent example of the importance of social interactions that were associated with baths, on which I have touched previously: he recalled the exile of the Samosatene bishop Eusebius by Emperor Valens, and how an Arian, Eunomius, took his place.[115] From the moment of his arrival, as the Church historian relates, the non-orthodox bishop was universally boycotted by the city's inhabitants; when at one time he went to bathe, his servant closed the door behind them, but as the new bishop noticed that some people had gathered outside, he invited them to join him – perhaps seeing an opportunity to reach out to his intractable flock. None of the locals accepted the invitation. Even those who were already present in the bath-house refused to enter the pool in which the bishop was immersed at the time. Concluding, according to Theodoret, that they were refusing to enter the same pool out of respect for him, Eunomius left it, but other bathers did not use the pool until it was drained of the water 'polluted' by the Arian, and refilled again. When Eunomius learned that the faithful Christians treated him with such abject revulsion, he gave up all hope of winning them over to his cause and left. Although the lack of listeners during ceremonies, which the Arian bishop had also experienced, had suggested the widespread enmity towards Arianism, the incident in the bath-house sent a very explicit message. Eunomius' behaviour is described by Theodoret as courteous and moderate, which makes it all the more obvious that the negative response towards him was motivated purely by religious reasons. The extent to which the Samosatenes supposedly detested Arianism is telling: the incident in the bath-house went beyond the usual forms of social ostracism and took on a nearly superstitious form.[116] A somewhat superficial similarity can be spotted between the avoiding of the 'contaminated' bathing water and the cautioning (previously mentioned) of Chrysostom against the tainting effects of the baptismal 'bath', should it be accepted from non-orthodox Christians. While Chrysostom's approach has more to do with rhetoric and simply warns against associating with the "heretics", the townsfolk of Samosata expressed their sentiment in a much more direct manner.

Eventually, as discussed in the first chapter, the nature of the bath-houses changed. These changes were accompanied by a gradual inclusion of some of the remaining establishments in the ecclesiastic possessions. As the great baths went out of use, many of the formerly secular establishments became attached to religious foundations, which charged for their use – these are best known from the example of Constantinople,[117] but are well known from Rome as well.[118] Magdalino noted that the *diaconiae*, religious confraternities which, among other activities, assembled weekly to feed and wash the poor, "Christianised" the bathing during the second half of the 6th century. Twenty-five of these confraternities have been attested in the sources between the 6th and 12th centuries.[119]

Similar developments have been observed in early mediaeval Italy by P. Squatriti.[120] He noted that while a gradual shift from large to smaller bath-houses can be seen, the bathing culture itself remained strong. Here, too, *diaconiae* existed and, among other aid, provided baths to the poor on Thursdays. Around the 840s, the popes had the baths near the cathedral restored. Baths still retained their character as meeting places, at least for the nobles and the well-off. Displaying wealth, especially by women, continued as before, and the same warnings about the moral risks that women who went bathing had to face were being repeated – either due to their continued relevance, or due to the long tradition of such warnings. One change that can be mentioned is the fact that the bathers tended, in general, to wash themselves rather than use the help of attendants.

Church canons devote little attention to the matter of bathing; the first remark can be found in the canon 30 of the synod in Laodicea (dated to about 363), which expressly forbids male Christians, especially the clergy and the ascetics, from bathing with women (but does not list any specific penalties for doing so).[121] The much later (692) Council in Trullo essentially repeated this prescription in canon 77, but added severe penalties: clerics caught breaking this rule were to be deposed, laymen were to be excommunicated.[122] Such was also to be the standard punishment for those who would associate themselves with Jews in any significant manner; prohibition named specifically using the services of Jewish doctors, taking medicines given by Jews and bathing in their company.[123]

Wealth and luxury in the context of bathing

That a bath-house might have been luxurious, profitable, and serve as a place for displaying one's wealth was discussed in the previous chapter; here, I wish to focus on the themes of wealth and luxury in the context of bathing and bath-houses from the perspective of Christian rhetoric. One example, briefly explored in the first chapter, is that of the apparent splendour of the baths at Cappadocian Macellum, along with the rest of the estate, which in the account of Sozomen takes an appearance that could rival any other imperial palace and is described in detail.[124] The baths themselves are listed as first of the splendid luxuries, indicating their importance. They, in and of themselves, do not appear to be of particular importance here. Instead, by being mentioned, they would seem to exemplify how even the best environment in which the future emperor was growing up did not prevent him from 'straying' from the right path. Sozomen does not mention information concerning, for example, the constant invigilation to which Julian was subjected, the fear for his life or being allowed very little contact with the outside world; doing so would have detracted from the idyllic image presented. The description is left without a commentary on the effect the supposedly excellent conditions had on the young prince's upbringing, but it wouldn't take much imagination to see it as indicating that too much luxury

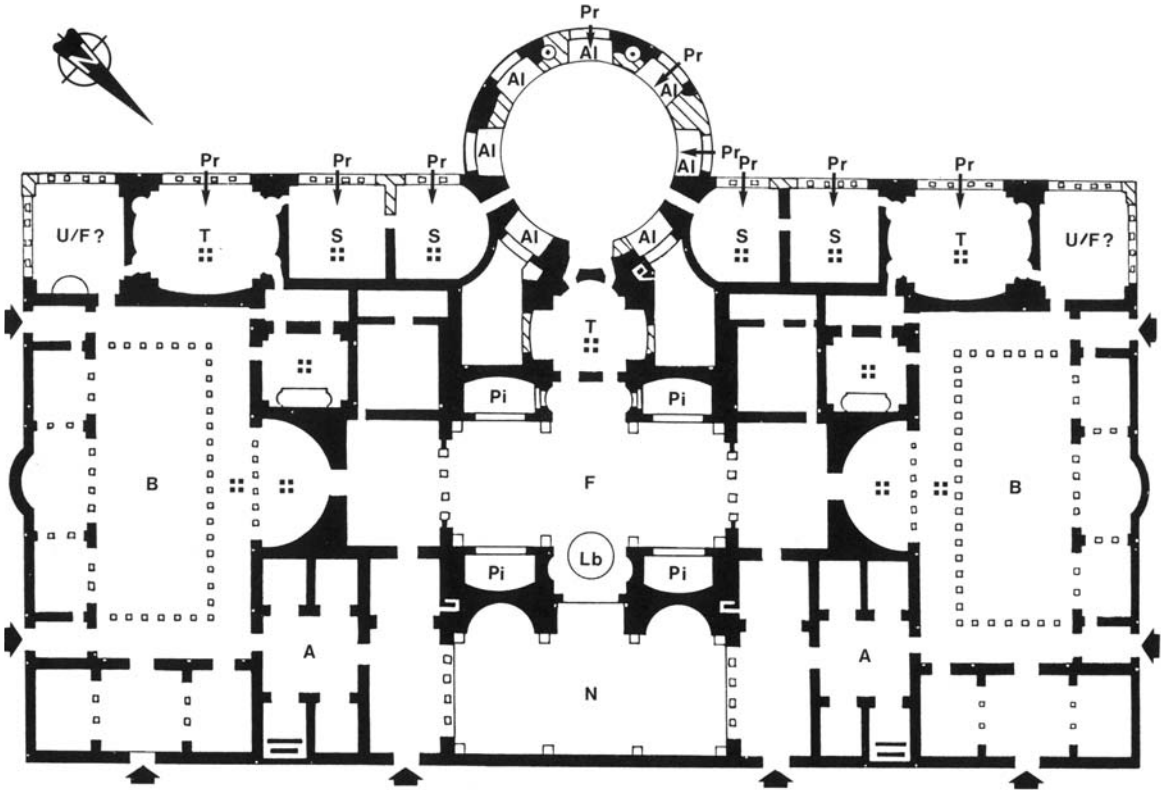

Fig. 2.1 Baths of Caracalla, Rome: plan of the imperial bath-house's main building. Reproduced by kind permission of Inge Nielsen, author of *Thermae et balnea. The architecture and cultural history of Roman public baths*, and Aarhus University Press.

Fig. 2.2 Lawrence Alma-Tadema, *The baths of Caracalla*, 1899. The artist's depiction adroitly captures the grandeur and opulence of an imperial bath-house. Public domain (Wikimedia Commons).

and wealth surrounding the future emperor had a negative impact on his developing character.

On the subject of luxury, Gregory of Nazianzus mockingly called the great baths of Zeuxippus in Constantinople "the new Jerusalem",[125] referring to their popularity (veritable 'pilgrimages' of bath-goers), and added that he did not frequent them. The Nazianzen addressed those Constantinopolitans who thought him a provincial rustic, and mentioned that his home town lacked the grandeurs of the capital city, such as the beautiful baths.[126] In turn, he criticised his listeners for enjoying (and paying too much attention to) the worldly luxuries. Gregory did not, however, criticise the bathing itself. Such arguments fall quite directly within the framework of the already well-established tradition of Christian preaching that condemned excess and lack of temperance and promoted moderation – a tradition, one might add, traceable back to the earlier pagan moralists.

The presence of various statues in bath-houses is widely attested; these included the statue of Medea, after which the Domitian's bath was named, the bronze statues of Daedalus and Icarus and of Bellerophon and Pegasus in the summer bath-house in Tripoli and the bronze statues in the baths of Zeuxippus, placed there by Constantine. General remarks about various decorations in Malalas seem to imply that at least the larger cities were well decorated.[127] This could mean that the embellishments specifically mentioned by Malalas were of exceptional quality – that many of them were situated in bath-houses is yet another indication of the important role these establishments played in everyday life, and their suitability for displaying art. The presence of pagan-themed statuary did not bring about outrage, or even criticism, from the Christian authors. The distinct lack of such remarks appears to indicate that Christians were generally happy to accept old statues as purely decorative and had no intention of condemning them as idols; no longer worshipped, depictions of pagan deities were now a mere ornament.

Socrates related[128] (and Sozomen repeated after him)[129] a number of anecdotes about the bishop of Novatians,[130] Sisinnius (he performed this function around the turn of the 4th and 5th centuries); the image the reader is presented with is that of a cheerful and witty person, and apparently very fond of bathing. When rhetorically asked why he, a bishop, was going to the baths twice a day, he was quoted to have replied that bathing more than that would have been too inconvenient. Given that bathing was not typically an expeditious affair, visiting baths multiple times in one day was likely to consume a better part of it. While both authors are keen to appreciate the witty reply made by Sisinnius, it is rather clear that going to the baths more than once a day was considered somewhat excessive. Indeed, if compared with the advice of the more ascetically inclined preachers and authors, Sisinnius' bathing habits appear quite luxurious and extravagant, especially for a bishop. This is in stark contrast to the ideals espoused by many of the other clergymen; T. T. Rice's commentary on the subject of bathing was that three baths a day were considered by the Church to be excessive, although

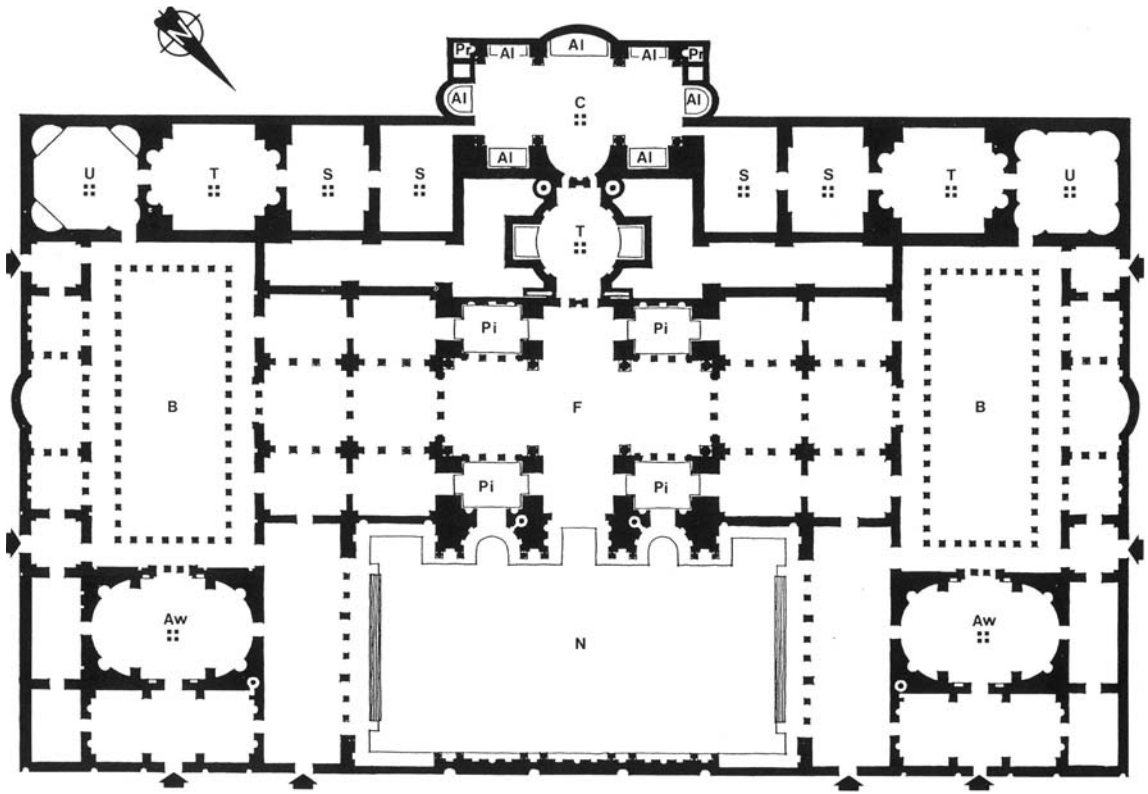

Fig. 2.3 Baths of Diocletian, Rome, the main building. Reproduced by kind permission of Inge Nielsen, author of *Thermae et balnea. The architecture and cultural history of Roman public baths*, and Aarhus University Press.

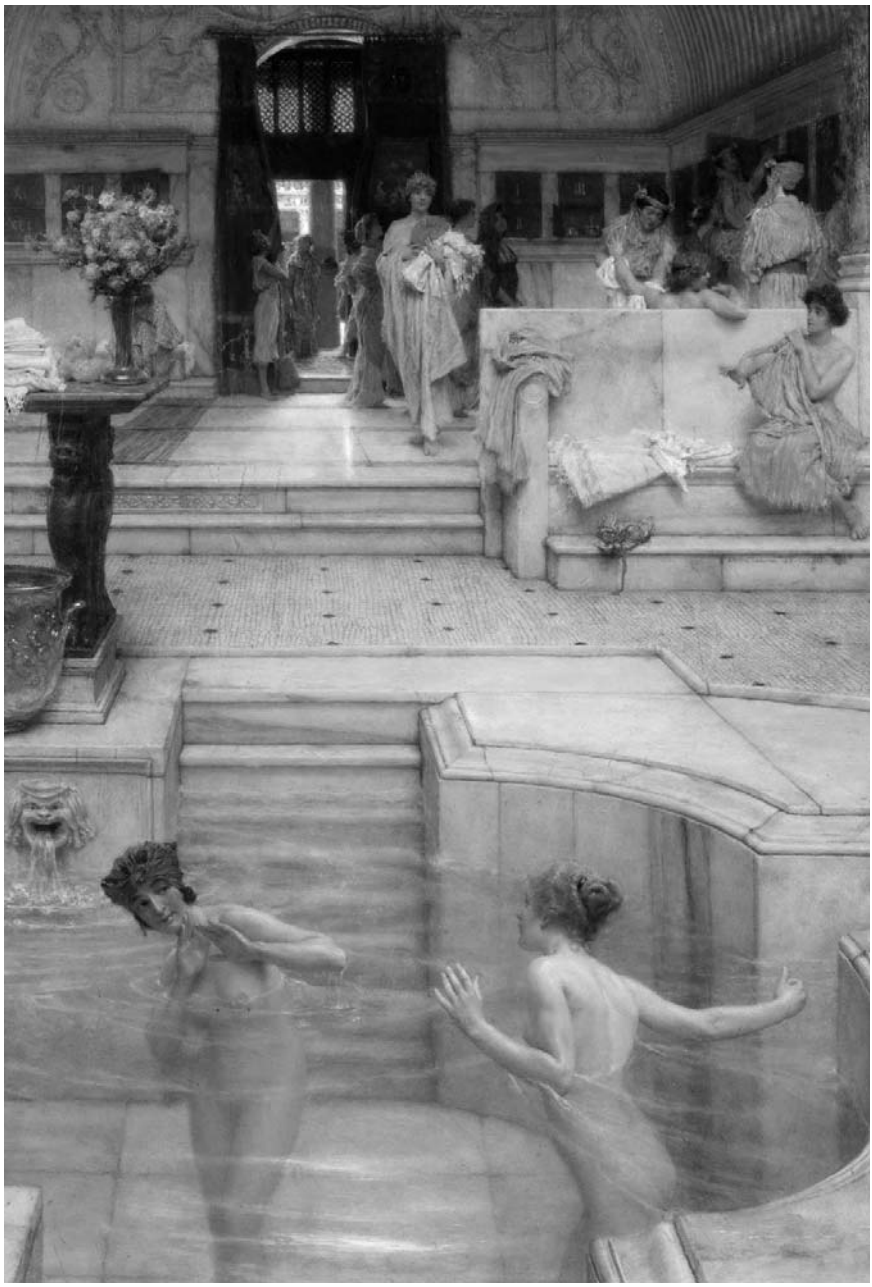

Fig. 2.4 Lawrence Alma-Tadema, *A favourite custom*, 1909. The artist's masterful rendition of marble surfaces found another expression here in a depiction of an upscale bath-house. Public domain (Wikimedia Commons).

two were not unusual. There is also a mention of the clerics in the 8th century being rebuked by their superiors for taking two baths a day.[131] Nevertheless, even in the eyes of Sozomen, the great admirer of Palestinian ascetics, the Novatian bishop's behaviour does not seem to provoke censure, perhaps because of the man's apparent amiability. This, incidentally, can be contrasted with Chrysostom's behaviour – who, while diligently performing his preaching and formal duties as the orthodox bishop of the capital, mostly neglected to fulfil the social expectations, such as hosting dinner parties and socialising, of the Constantinopolitan elite. Once again one is reminded that the ascetic lifestyle was quite different from the one a high-ranking clergyman was expected to lead, and it is, in a way, a testament to Chrysostom's integrity that he lived the life he preached – even if at the same time it alienated him from the upper classes.

Chrysostom had a lot to say about the luxuries that accompanied bathing: in a particular example, a rich man is opposed to one suffering from poverty: the rich man enjoys fine clothes, good food, overall well-being – and the pleasures of bathing. The poor one, in comparison, is hungry and destitute. While it was not uncommon for the poor to be able to go to the baths, especially when the entry was free, the rhetoric used here obviously could not have mentioned this. Admittedly, the wealthy could afford to go to some of the more lavish, private baths, while using more expensive cosmetics and having more attendants at their disposal, both their own and those provided by the bath-house.[132] It should be also remembered that usually there were many baths available in any town or city, and that they varied greatly in size and the number and quality of amenities they offered. Unless a poor person was able to find a sponsored bath, they would have to satisfy themselves with the cheapest place, perhaps bathe without any assistance and, in all likelihood, spend less time relaxing there in general.

In a similar manner, the wealthy person is placed in a bath-house in another homily, enjoying the pleasures provided by the facility; these are presented as a luxury, grouped together with an excessively well-supplied table and a number of servants attending the rich man's matters.[133] Chrysostom concluded that the poor should not be covetous of the earthly pleasures that are out of their reach, as in leading a simple life of poverty they are following a path to salvation. The less well-off should thus be happy that at least some of the temptations of this life are outside their means – while the wealthy, once again, are sent a signal that they ought to avoid indulging in pleasures that they can afford.

Bathing again appears, together with eating, as one of the things that are necessary in life – but which are harmful when overused.[134] However, when Chrysostom finds himself in a situation where he is accused of, among other things, using the baths, and sees that there are some who think that he should not frequent them at all (or at least much less often), he defends himself by saying that there is nothing to indicate that Christians ought to refrain from bathing, and that there is no honour to be gained from being dirty.[135] This

has interesting implications for considering the negative approach to bathing common among the ascetics, but the contradiction here is not explicit: the monks were to avoid pleasure and various temptations, and both abounded in the baths; but avoiding cleanliness in principle was quite radical and far from what was expected even of a monk. Baths can be found listed by Chrysostom among the things and institutions, such as cities or markets, that were made commonplace by God for the benefit of all.[136] While the ascetics preferred to avoid all of these, it is clear that at least in Chrysostom's opinion none of them were evil or dangerous in and of themselves.

In the previous chapter I briefly discussed the alleged eagerness of the Vandal people to embrace the luxurious Roman lifestyle. It is worth noting that, in this case at least, their religious affiliation had not been brought up by Procopius. The excessive love of wealth and extravagance ascribed to the Vandals by the author could have easily been linked with the Arian faith, had Procopius wished to do so. Otherwise willing to pay at least lip service to the role of the religion in shaping of many of the events he described (and, occasionally, not shying away from including mentions of events bordering on the supernatural), the historian seems to have been content to indicate the ethnicity, rather than religion, of the conquerors of the previously Roman North Africa as the chief cause of the moral failings of the Vandals.[137] That said, the criticism of the Vandal people, while dressed in different words is, quite clearly, based on the same ideas and values that were preached by Chrysostom over a century before. Far from moralising or trying to provide a better model of life in his text, Procopius is nonetheless pointing out the same failings for which the Romans themselves were criticised by their own preachers.

As a side note, a particular reference to the functioning of the baths (and the use of wealth) can be found in a fragment where Chrysostom compares a pile of gold a rich man possesses to a heap of dung: the comparison is clearly in favour of the dung, as it can be used in a number of useful ways, for example, in heating a bath (while the gold itself has no inherent practical use whatsoever).[138]

Baths and popular beliefs

Christians were not the only ones to casually mention baths when talking about religious (or quasi-religious) matters. Ammianus Marcellinus, when discussing the extent to which superstitions were common among fellow pagans, remarks mockingly that some of them needed to consult calendars to make sure that astrological signs were good before various undertakings. The practice itself does not seem to be criticised, but the comments on resorting to astrology even before engaging in activities such as eating a meal, showing publicly or going to the baths show disdain for such overreliance on supernatural signs.[139] Ammianus is, of course, exaggerating, but the examples he provides do make clear the mundane and everyday nature of

bathing. Ammianus mentions another instance of belief in the supernatural, specifically, belief in omens, that involved a bath-house. During Valens' stay in Savaria[140] (in 375), an owl was spotted perching on the top of the imperial bath, and made sounds that were interpreted as foretelling death; despite the attempts of many people to chase away the owl by throwing objects, nobody was able to successfully hit the hooting bird.[141] In this case, the link between the building and the Emperor seems to have been the key element in interpreting the evil omen – one that, while coming relatively early, in the light of the Emperor's subsequent death in the battle of Adrianople in 378 was later considered to have been true.

Bath-houses themselves were sometimes used for quasi-magical purposes: one example provided by Ammianus describes how a young man was executed during the reign of Valens for "magically" (as it was apparently judged to be) trying to alleviate his stomach trouble by first touching the marble (of wall or floor) in a bath-house, then his chest, while reciting the seven (Greek) vowels; he was tortured and beheaded for this.[142] Ammianus does not elaborate on whether the practice was indeed supposed to have a "magical", pseudo-medical or actual medical significance. The location where the man was seen performing his little ritual was important only in so far as the public character of the baths was concerned (in that the youth was spotted doing something suspicious).

No discussion of beliefs in the supernatural associated with bath-houses would be complete without at least a few remarks on the so-called curse tablets. Possibly the most extensive study on the subject can be found in B. Cunliffe and R. Tomlin's work about the baths at the temple of Sulis Minerva in Bath.[143] Bath-goers would deposit (typically) lead tablets with inscriptions beseeching the deity to act – often to deliver justice to a wrongdoer, such as a thief who on a previous occasion stole their garments.[144] A tablet could dedicate the stolen clothes or items to the deity, in an attempt to retroactively turn what was previously an act of common theft into sacrilege. Such tablets were usually deposited in places considered associated with a deity – temple or sanctuary baths were certainly among these. Commonly, pleas were directed to the deities of the underworld and buried. Requests varied, and while many asked for justice or vengeance, others promised sacrifices for, e.g., carnal reciprocity.

A different link between the baths and superstition also appeared in Chrysostom's homily targeting a practice that the preacher found laughable: he mentions seeing some servant girls making a mark with mud on a child's forehead that was supposed to turn away evil charms and protect the child from other supernatural influences. Here, the baths themselves do not seem to have any particular significance: they are not mentioned again, and the bishop continues ridiculing the alleged power of mud to keep the devil away.[145]

One more example of (what might be called superstition) associated in the baths, this time noted with some approval, comes from Chrysostom: at one

point he must have noticed that his faithful were absent-mindedly making the sign of the cross when entering the baths (or when lighting a candle); seeing this evidently habitual behaviour, he advises his flock to consciously develop beneficial habits – like, for example, not swearing.[146] The habitual making of the sign of the cross could potentially indicate awareness of the somewhat risky (that is, providing opportunities to sin, if only by thought) nature of bathing establishments; or, somewhat more prosaically, the large and open space of a grand bath-house was sufficiently similar to that of a church to evoke a similar reaction. It also shows Chrysostom's appreciation for simple conditioning of his listeners (as a means of reducing the risk of sinning).[147]

Baths were given considerable attention in the dream book of Artemidorus, written during the 2nd century.[148] The methodology of interpretation of dreams seems fairly straightforward – qualities and properties of everyday objects, places and events seen in a dream are extrapolated and given explanation that is in some way directly relevant to those meanings. Artemidorus even comments on earlier authors' works, and explains how meaning of certain dreams has changed, reflecting the change in bathing customs. While written prior to the times that are of main interest for the purpose of this study, the wealth of information on bathing customs included in the dream book and the fact that bathing practices changed relatively from the 2nd to the 5th, and even 6th centuries, are enough to justify giving this source more attention.

Artemidorus comments that early authors did not link dreams of bathing or washing with inauspicious events, as bathing took place in private bath-tubs.[149] However, since public baths had come into being, dreams of bathing or even seeing a bath were believed to indicate bad luck. Because baths were noisy places, seeing them indicated turmoil. In a similar manner, sweating meant harm and change of skin colour meant anguish and anxiety.

Artemidorus replied that such negative associations might have been correct in earlier times, when people bathed less often, and usually only after returning from battle or after hard work. In his time, however, bathing was a common and luxurious activity; he believed that dreams of washing in bright, spacious and warm baths are auspicious. For the sick, it means a return to health, for those already healthy – success in business. He noted that this is only true if the dream bathing is taking place as normal; entering hot baths with clothes on meant sickness and mental anguish; for the sick enter the baths clothed, and anxiety causes people to sweat. The remark indicating that the sick would enter the bathing area dressed is worth additional attention; this is not something commonly mentioned in other sources.

Assistance or lack thereof whilst bathing might also indicate problems: a poor person dreaming of being attended by many indicated illness (for in no other circumstances would this have happened normally), and for a wealthy person, conversely, bathing alone was an ill omen – as they would usually be accompanied by others. The following were considered ill omens for everyone: not being able to sweat, seeing bath-houses where rooms or

ceilings have caved in, or finding no water in the tanks. Here Artemidorus mentioned how an acquaintance of his, a lyre player, had a dream in which he went to wash himself, but found no water to do so. He was subsequently disqualified from a contest for trying to bribe the judges (and thus was unable to achieve the victory he desired). Artemidorus did not comment any further on his friend's attempted bribery.

Dreams of bathing in natural, warm springs signified health for the sick, but unemployment for the healthy – as the people likely to visit the springs were the sick and those who did not have anything to do, reinforcing the idea of hot springs' association with recuperation and leisure. Dreams of washing in clean, clear water, wherever it was found, were auspicious, but dreams of swimming, Artemidorus noted without giving further explanation, were always symbolic of danger and disease. Following the dream book's advice, one learns that scrapers, brushes and towels meant attendants; losing one of them in a dream signified loss of an attendant; this provides further evidence of the presence of private attendants in the baths. On their own, scrapers meant harm (as they scrape off sweat, but in removing it they add nothing to the body); they could also mean a courtesan, Artemidorus argues, and for the same reason of removing substance from one's body. A flask of oil or a box with scrapers meant a good wife, a faithful handmaid or a useful slave, further hinting at the usefulness and value of bath-related accessories, their containment and orderliness being a positive sign. Dreams of singing in the baths were believed to be generally inauspicious.[150] They meant that the dreamer's voice would become indistinct and furthermore, many people were condemned to prison after having such dreams (although this passage lacks further explanation or reasoning as to why that may have been the case). The act of washing was a figurative way of saying that something will be disclosed (thus threatening to wash someone meant revealing some information about them).[151]

Dreaming of washing one's face or using ointments was also inauspicious, since it signified some flaw. An example of a young man is given who dreamt that he anointed his face "like a woman would" and subsequently went to a theatre – later, in real life, he was caught committing adultery. A different example mentioned a merchant who had a dream of washing his face with wine, and who later found his stored wine had gone bad. Artemidorus commented here that in a dream wasting something through improper use indicated misfortune.[152] Such an inappropriate use can also be seen in another dream in which a runner who was previously awarded a crown for winning a sprinting competition at the Olympic games saw himself washing his feet in the crown as if it were a wash basin. In a later competition, he lost and was disgraced. The commentary to this explains that this was because in the dream he dishonoured his previously won crown.[153]

The examples mentioned above indicate a number of things about the attitude to bathing and accepted behaviour in the context of bathing and washing. It is not difficult to see that practically all of the presented dream

interpretations are strongly grounded in everyday practice and experience, as these were crucial for Artemidorus' methodology. What is perhaps even more interesting is the fact that a later dream book (dated to between the 4th and 6th centuries), the *Oneirocriticon* of Daniel, devoted very little attention to bathing; one of its entries merely stated that seeing a bath-tub, or bathing in one, signified confusion, without providing further details – and that building a bath-tub meant distress.[154] The only other remark that might be relevant here concerns a dream vision of taking off one's clothes. It is interpreted as a good omen for the sick, but bad for all others.[155] It is similar to Artemidorus' remark which interpreted losing one's clothing in a negative light, unless the dreamer already was in a difficult situation – in which case the clothes symbolised the surrounding evils and problems, and entering baths clothed indicated sickness; in such case loss of clothing meant good things.[156] A. Crislip also noted that bathing of the entire body in a monastery was only allowed in sickness, and that the bathed person should remain clothed – unless the disease was clearly visible (thus reducing the risk of impure thoughts that could be provoked by the sight of nudity).[157] Still, one should not draw too far-reaching conclusions from the brevity of the remarks on bathing in Daniel's dream book, as the whole text was much shorter and more general than that of Artemidorus, and entirely devoid of detailed explanations of particular visions; it dispensed with the older tradition of careful and detailed elucidation of dreams in favour of highly generalised and concise remarks.

Finally, a brief remark on a minor event that took place during Belisarius' campaign in North Africa involving, again belief in omens. It does not concern bathing directly; however, given how much attention ancient authors devoted to natural springs, and the connection thereof with bathing (especially when a spring was famed for miraculous properties), addressing the relevant passage should be justified. The described event comes from Procopius, and relates[158] the finding of a spring by Roman soldiers. They found an abundant source of water when preparing fortifications near Byzacium, and the amount of water it provided proved to be sufficient for the needs of the Byzantine army. Furthermore, Belisarius, perhaps persuaded by Procopius, apparently considered finding the spring a good omen (or, at least, decided to present the discovery to his troops as such). Successes indeed followed. A. Cameron noted that the way in which Procopius presented the events during the expedition, and his own attitude, was to stress the divine approval for the re-conquering of Africa.[159] The reason for this might have been either genuine belief that this was the case, or a conscious literary choice, expressing the author's somewhat (genuine or otherwise) naïve piety.

Bathing in the Jewish community

Somewhat aside from rest of the population of the Roman Empire, in terms of their culture and customs, were its Jewish inhabitants. With numerous religious rules regulating matters of ritual and physical purity, a few

remarks on the impact these had on Jewish bathing customs should not appear out of place.

The Jewish texts regulating bathing can be found in Mishnah, Tosefta, and other Talmudic commentaries. A bath-house was seen as one of the necessary institutions in a city, for ritual reasons – but Jews also frequented gentile establishments, as can be seen from a relatively well-known passage. Rabban Gamaliel (first half of the first century, d. AD 52), questioned about bathing in a bath-house of Aphrodite, replied that the bath-house was not made for Aphrodite, but that the statue was made as a decoration. Furthermore, he explained that since the statue was not treated with the respect offered to cult idols – in fact, gentiles urinated in its presence – any doubt about the purely decorative role of the statue was removed.[160] Therefore, prohibitions concerning idols did not apply.[161] This opinion was not, of course, the only one, and stricter readings of the traditional prohibitions were present as well – e.g. Mishnah forbidding not merely the presence of statuary in the baths, but even of niches in which such statues could be placed.[162]

Areas where hot springs could be found were generally associated with frivolity and moral dissolution; places like Hammat Gader and Emmaus are mentioned as famous for their hot springs. Such an attitude is quite in line with the reputation the more famous resorts, such as Baiae, had at the time, but is an interesting contrast to the general depiction of places of healing that were considered to be miraculous by Christians (such as Emmaus-Nicopolis). That said, S. Hoss mentions that some rabbis wanting to discuss legal issues would meet at baths, to avoid drawing attention of the authorities to themselves.[163]

An important question related to bathing was nakedness – considered an obstacle for performing various religious functions (like studying the Torah or praying, as well as wearing the *tefillin*, phylacteries containing scrolls with inscribed passages from the Torah). The matter has been discussed to some extent by M. L. Satlow; what is of the greatest interest here is the conclusion that a bath-house was not necessarily unsuitable for religious activity – provided that all of those present in a given room were clothed (i.e. had their genitals covered).[164] The matter was also discussed by Y. Z. Eliav, who further discussed the possible Jewish approaches to nudity in the baths in general, concluding that, like Christians, Jews found ways to deal with the problematic nudity by – in some but certainly not all situations – separating the sexes in the baths using various means (assigning bathing times, having separate baths or sections of baths).[165] Regulations concerning nudity do strongly imply that at least some of the Jews did bathe completely naked, though S. Hoss stated that a cloth around the hips seems to have been more common.[166] Furthermore, she mentions that women were discouraged from bathing in public baths, as this might have been a cause for divorce and the loss of her *ketubah* (previously agreed sum to be paid by the husband in the case of a divorce); according to another interpretation, this would happen only if the woman behaved in a clearly improper manner,[167] and, given clear

remarks on the subject of female nudity in public bath-houses in Mishnah,[168] it would seem the latter interpretation is correct.

Bathing on the Sabbath was not, itself, forbidden, although it was restricted in a number of ways: the heating of water, carrying of bathing implements and helping others in washing were among the prohibited activities – but this still allowed for bathing in the sea water and in baths supplied by hot springs. The differences between the Jewish and Roman bathing customs were not reflected in the construction of the baths. The reception of Roman bath-houses by the Jews was generally good.[169] Other limitations on bathing were related to fasting. During certain fasts bathing was prohibited outright – although this was not required in all cases.[170] Similarly, mourners were to avoid bathing in principle, however bathing was deemed acceptable by some rabbis if it was done for health reasons.[171]

Briefly discussing Christian bathing life, Hoss pointed to the similarities in the pragmatic approach towards bathing exhibited by the followers of the newer religion.[172] The gymnasia, associated with paganism, were seen in a highly negative light; the last mention of a gymnasion in Egypt comes from 370 CE. Christians continued to attribute the curative powers of certain places to supernatural forces, although with the difference that they were now associated with saints rather than pagan deities.[173] Abstaining from bathing (*alousia*) became commendable over the course of the 4th century, under the influence of ascetics – as had already been noted in this chapter.[174] There also are records of baths being closed for the time of mourning (such as after the death of Constantine in 337).

Conclusions

Bathing played an important role in the religious discourse of Christians for a number of reasons. It shared superficial similarities with Christianity's rite of baptism, and thus provided a wealth of already familiar vocabulary and expressions that could be easily adapted for describing and explaining baptism itself. When contrasted with the rite, everyday bathing was invariably presented as inferior, imperfect, occasionally even entirely redundant, particularly among those who rejected the fleeting pleasures of the mortal life; the miraculous effects of baptism, on the other hand, are underlined and praised. The perceived sanctity and importance of baptism had wide-reaching consequences: the rite could be befouled if administered by heretics, and thus harm, rather than help (although its power was not rendered void by being administered by non-orthodox hands). The rite's apparent simplicity, similarity to mundane washing and the lack of any particular signs of supernatural involvement were also used to mock baptism by opponents of Christianity.

The language of bathing was occasionally extended to martyrdom, in cases when 'baptism' by the martyr's own blood was discussed. On the occasion when bathing appeared in the description of martyrdom, its usual

connotations, that of a peaceful and pleasant environment, were reversed to create a surprising and shocking narrative – a carefully constructed effect that would not be nearly as effective without drawing on the well-established image. Bath-houses also served as a backdrop to a number of supernatural events, ranging from the deaths of blasphemers to miraculous healings. The places associated with healing often had a longer history: springs to which Christians went to bathe, hoping to regain health with the assistance of saints, were often frequented by non-Christians seeking aid of various deities, in the earlier centuries. Occasionally, baths appear in narratives of miracles simply as a location in which a supernatural event occurred, their names preserved to emphasise the reality of the miracle.

Christians, in general, did not reject the communal aspect of bathing; while the persecutions still lasted, it provided a means of integration and facilitated co-existence, albeit not devoid of risks moral in nature, and therefore treated with some caution. Little changed once Christianity became fully legal. Deeply ingrained in daily routines, bathing was simply another element of secular life – necessary for those who did not reject society as whole, potentially distracting from godliness, but hardly something to be abhorred; it was also permitted under limited circumstances to those living the more demanding monastic life. There was nothing preventing the use of bath-houses for conducting secular nor, indeed, pious activities. While the ownership of bath-houses was a clear sign of wealth, this wealth could be used to facilitate good works, and therefore did not automatically draw censure. It was certainly more pious to use one's wealth to directly assist the Church than to use it for mundane and secular purposes, such as bath-house building; but, in the end, the long-term profits of such investments did not uncommonly make their way to the Church, and in time bathing complexes became attached to some of the ecclesiastic institutions.

Those Christians who rejected society as whole and chose an ascetic lifestyle did sometimes reject bathing outright; however, this was simply a consequence of rejecting everything that could provide pleasure and distract one from God, sometimes inspired by the Gnostic rejection of the mortal body. The most objectionable aspects of using bathing establishments were the risk of temptation arising from the presence of members of the opposite sex, followed by the relaxation and pleasure that threatened self-discipline. For the ordinary Christians, however, only moderation and avoidance of active pleasure-seeking were advised – which was in line with advice concerning other daily activities, such as eating or drinking. Nakedness in a bath-house was a given, and not an issue in and of itself. Eventually, bath-houses started being used by Christians for charitable purposes: either for bathing of the poorest, or as a source of income for other Church-run activities.

As a major part of daily life, baths were incidentally witness to, or associated with, activities that might be described as superstitious. Unusual behaviours or occurrences could have been given deeper meanings, although in most such cases the fact that they happened in a bath-house was incidental;

the places themselves were not given special significance – with the exception of dream books. In these, the appearance of a bath-house, or items or people linked with it, were interpreted in a reasoned and fairly straightforward manner, with the symbolic meaning derived from their everyday associations.

The Jewish population of the Empire made use of the Roman baths, and the social norms and attitudes of this community were largely similar to those displayed by Christians. Aside from a few specific rules pertaining to prayer and the Sabbath, and some more rigorous applications of rules preventing idolatry, Jews largely used bath-houses in the same manner as Christian Romans – albeit religious debate, encouraged among Christians by Chrysostom, was constrained among Jewish bathers by the nudity of the bathers.

Notes

1 E.g. J. L. Maxwell, *Christianization and communication in Late Antiquity*, Cambridge 2006, p. 5ff.
2 I. Sandwell, *Religious identity in Late Antiquity* . . ., pp. 126–147.
3 D. S. Wallace-Hadrill, *Christian Antioch* . . ., pp. 155–159.
4 Gregory of Nazianzus, *Epistulae*, 78; in: P. Gallay (ed.), *Lettres*, Paris 1964, 1967; *Carmina moralia*, 24, 34, MPG 37. Similar expressions can also be found in *Carmina de se ipso*, MPG 37.
5 Gregory of Nazianzus, *In laudem sororis Gorgoniae* (orat. 8), 14, MPG 35.
6 Gregory of Nazianzus, *In sanctum baptisma (orat. 40)*, 4, MPG 36.
7 Gregory of Nazianzus, *In sanctum baptisma (orat. 40)*, 10, 28, 32, 35, MPG 36. The strength that baptism brings does not come without an effort, though (32), and without it, the soul might end up in an even worse state when the old habits ("evil spirit") return (35).
8 Gregory of Nazianzus, *In sanctum baptisma (orat. 40)*, 11, 20, 25, MPG 36.
9 E. Ferguson, *Baptism in the early Church: history, theology, and liturgy in the first five centuries*, Cambridge, MA 2009, pp. 617ff.
10 Gregory of Nazianzus, *In sanctum baptisma (orat. 40)*, 21–22, MPG 36.
11 Gregory of Nazianzus, *Funebris oratio in patrem* (orat. 18), 13, MPG 35.
12 John Chrysostom, *Ad illuminandos catecheses 1–2 (series prima et secunda)*, 1, 2, MPG 49.
13 John Chrysostom, *In epistulam ii ad Corinthios (homiliae 1–30)*, 15, 6, MPG 61.
14 Gregory of Nazianzus, *In Aegyptiorum adventum* (orat. 34), 12, MPG 36.
15 Gregory of Nazianzus, *Carmina dogmatica*, 9, MPG 37.
16 John Chrysostom, *In epistulam ad Galatas commentarius*, 4, 28, MPG 61.
17 C. Markschies, *Between two worlds. Structures of earliest Christianity*, London 1999, p. 65.
18 C. Markschies, *Between two worlds* . . ., p. 64.
19 NRSV, Romans 6:3f.
20 I. Sandwell, *Religious identity* . . ., p. 196.
21 Procopius, *History*, 4, 14, 14ff.
22 Procopius, *History*, 4, 26ff.
23 John Chrysostom, *In epistulam ii ad Timotheum (homiliae 1–10)*, 6, MPG 62.
24 A. von Stockhausen, "Christian perception of Jewish preaching in early Christianity?", in: A. Deeg, W. Homolka, H.-G. Schöttler (eds.), *Preaching in Judaism and Christianity*, Berlin 2008, p. 68.
25 John Chrysostom, *In Joannem (homiliae 1–88)*, 11, 4, MPG 59.

26 John Chrysostom, *In epistulam ad Romanos (homiliae 1–32)*, 31, MPG 60.
27 John Chrysostom, *In Matthaeum (homiliae 1–90)*, 5, MPG 57.
28 John Chrysostom, *In epistulam i ad Corinthios (homiliae 1–44)*, 17, 2, MPG 61. The preacher further explains why Paul singled out this particular sin, and how others are, in fact, as bad as this one.
29 Gregory the Great, *Epistles*, 64, in: NPNF, ser. 2, vol. 13, ed. P. Schaff.
30 John Chrysostom, *In Acta apostolorum (homiliae 1–55)*, 31, MPG 60.
31 Sozomen, *Historia ecclesiastica*, 1, 13.
32 Sozomen, *Historia ecclesiastica*, 6, 16.
33 The work is discussed by, *i.a.*, R. Smith, *Julian's gods: religion and philosophy in the thought and action of Julian the Apostate*, London 1995, pp. 189–207 and, more recently, by D. Hunt, "The Christian context of Julian's *Against the Galileans*", in: S. Tougher, N. Baker-Brian (eds.), *Emperor and author. The writings of Julian the Apostate*, Swansea 2012, pp. 251–261.
34 1 Cor 6:9–11, NRSV.
35 Julian, *Against the Galileans* I, 245, in: *The works of the Emperor Julian*, transl. W. C. Wright, London, New York 1913–1923.
36 Gregory of Nazianzus, *Contra Julianum imperatorem* 1 (orat. 4), 51, MPG 35.
37 Gregory of Nazianzus, *Contra Julianum imperatorem* 1 (orat. 4), 51, MPG 35.
38 Gregory of Nazianzus, *Carmina moralia*, 34, MPG 37.
39 It should be noted that the cult of the Forty Martyrs was very important in Basil's family. Even the family's tomb was located in a shrine dedicated to the Sebastean martyrs; R. Van Dam, *Families and friends* . . ., pp. 16–17. Other accounts of the martyrdom of the forty Christian soldiers include that of Gregory of Nyssa and many later ones. Later authors suggest the martyrs were actually immersed in the cold water, and not on the frozen surface.
40 Basil of Caesarea, *In quadraginta martyres Sebastenses*, MPG 31.
41 Theophanes, *Chronographia*, 143, AM 5991 (498/9). The commentary on p. 219n traces the source of this information to Theodorus Lector and John Damascene.
42 O. Temkin, *Hippocrates in a world of Pagans and Christians*, Baltimore and London 1991, p. 138.
43 O. Temkin, *Hippocrates* . . ., p. 154.
44 O. Temkin, *Hippocrates* . . ., pp. 158–159.
45 G. Clark, "Bodies and blood: late antique debate on martyrdom, virginity and resurrection", in: D. Montserrat, *Changing bodies, changing meanings. Studies on the human body in antiquity*, London, New York 1998, pp. 109–110.
46 D. W. Amundsen, "Medicine and faith in early Christianity", *Bulletin of the History of Medicine*, vol. 56, no. 3, 1982, pp. 326–350.
47 D. W. Amundsen, "Medicine . . .", p. 339.
48 A. Crislip, *Thorns in the flesh. Illness and sanctity in the late ancient Christianity*, Philadelphia 2013, pp. 15–20.
49 A. Crislip, *Thorns* . . ., pp. 2–5.
50 A. Crislip, *Thorns* . . ., pp. 26–34, 46–48.
51 A. Crislip, *Thorns* . . ., pp. 50–51.
52 The distance of Nicopolis from Jerusalem is about 31–32 km – while the distance mentioned in Luke 24:13 is 60 stadia, or about 11.5 km. Identifying the biblical Emmaus with Nicopolis would have meant that the disciples walked over 62 km in a single day, in addition to stopping for a meal in the village. This makes it unlikely – though not impossible – that Emmaus-Nicopolis was indeed the location where the events described by Luke might have taken place.
53 Sozomen, *Historia ecclesiastica*, 5, 21.
54 This link was already made nearly a century ago by G. F. Hill, "Apollo and St. Michael: some analogies", *Journal of Hellenic Studies*, vol. 36, 1916,

p. 146. Hill notes that the place where the baths were built is near modern-day Yalova.
55 Procopius, *Buildings*, 5, 3, 16–20.
56 J. A. Evans, *Empress Theodora. The partner of Justinian*, Austin, TX 2004, p. 29.
57 J. W. Drijvers, *Helena Augusta. The mother of Constantine the Great and the legend of her finding the True Cross*, Leiden, Boston, MA 1992, pp. 9–12.
58 Sozomen, *Historia ecclesiastica*, 2, 34.
59 R. Alston, *The city in Roman and Byzantine Egypt*, London and New York 2002, p. 109.
60 *The miracles of St. Artemios. A collection of miracle stories by an anonymous author of seventh-century*, transl. V. S. Crisafulli, intr. J. W. Nesbitt, Leiden, New York, Cologne 1997.
61 *The miracles of St. Artemios* . . ., p. 7.
62 *The miracles of St. Artemios* . . ., pp. 1–6.
63 *The miracles of St. Artemios* . . ., m. 34.
64 *Ta Paschentiou – xenon* near the Deuteron palace (possibly in the northern part of the city, south of Blachernai), R. Janin, *Constantinople Byzantine* . . ., p. 404. The exact location is unknown. The palace that is mentioned may have been Deuteron palace, rather than the imperial one; it is impossible to tell.
65 *The miracles of St. Artemios* . . ., m. 11.
66 *The miracles of St. Artemios* . . ., m. 21.
67 Malalas, *Chronographia*, 12, 50.
68 R. Webb, *Demons and dancers: performance in late antiquity*, Cambridge, MA 2008, pp. 125–126.
69 Gregory of Nazianzus, *Orat.* 2 (*Apologetica*), 84, MPG 35. Cf. K. F. Smith, "Drama (Roman)", in: *Encyclopedia of religion and ethics*, ed. J. Hastings, v. 4, C. New York 1932, p. 907.
70 Tertullian, *Apology*, 42, 1–3.
71 Theophanes, *Chronographia*, 42–43, AM 5849 (356/7). The translators' note on p. 72 clarifies that most of the described events actually took place between AD 342 and 350 (when Paul died).
72 M. Krawczyk devoted an article to the question of whether an inscription from the fort at Tirisa (Kaliakira) referred to Flavius Hermogenes – the *magister militum* (view supported by A. Balkan), or Flavius Hermogenes – *proconsul Achaie*, arguing against the former, as renovation of fortifications was the domain of local officials. M. Krawczyk, "Flawiusz Hermogenes – *magister equitum* Konstancjusza II czy *praeses provinciae Scythiae*?", *U schyłku starożytności. Studia źródłoznawcze*, vol. 15, 2016, pp. 31–40.
73 Socrates Scholasticus, *Historia ecclesiastica*, 2, 16.
74 Sozomen, *Historia ecclesiastica*, 3, 9.
75 Socrates Scholasticus, *Historia ecclesiastica*, 6, 18; Sozomen, *Historia ecclesiastica*, 8, 21.
76 Sozomen, *Historia ecclesiastica*, 8, 23.
77 Malalas, *Chronographia*, 14, 38. This event is also mentioned by J. B. Bury in his *A history of the later Roman Empire from Arcadius to Irene (395 A.D.–800 A.D.)*, London 1923, p. 223.
78 A. Kaldellis, *Hellenism in Byzantium. The transformations of Greek identity and the reception of the Classical tradition*, Cambridge 2007, p. 138. The fame of Isokasios was so widespread that even Theodoret of Cyrrhus urged his charges to study under that philosopher (despite his "fame" of being a pagan).
79 *Chronicon paschale*, 595.6–596.12.
80 *Chronicon paschale*, 595.6–596.12.
81 Theophanes, *Chronographia*, 115.9–19.

82 John of Nikiu, *Chronicle*, transl. R. H. Charles, Oxford 1916, 88.7–11. This rather dramatic account of the events does specify that Isokasios converted to Christianity spontaneously and of his own accord, while not devoting much attention to the place where the tribunal assembled; the verdict initially passed on Isokasios was exile. After his conversion, Isokasios is said to have regained the Emperor's favour, and his previous position.
83 *Suidae lexicon*, II 601.14–15, ed. A. Adler, Leipzig 1931
84 J. Prostko-Prostyński, *Iudicium quinquevirale. Sąd senatorski w Rzymie i Konstantynopolu od Gracjana do Justyniana*, Poznań 2008, p. 139.
85 J. Prostko-Prostyński, *Iudicium quinquevirale* . . ., pp. 139–140.
86 J. Prostko-Prostyński, *Iudicium quinquevirale* . . ., p. 141.
87 J. Prostko-Prostyński, *Iudicium quinquevirale* . . ., pp. 144–145.
88 F. Yegül, *Bathing* . . ., pp. 201–206.
89 John Chrysostom, *In Joannem (homiliae 1–88)*, 65, 3, MPG 59.
90 C. Markschies, *Between two worlds* . . ., p. 172.
91 B. Ward-Perkins, *The fall* . . ., p. 131 (fragment translated by E. Clark).
92 John Chrysostom, *In Matthaeum (homiliae 1–90)*, 81, 4, MPG 57.
93 John Chrysostom, *In epistulam i ad Timotheum (homiliae 1–18)*, 2, MPG 62.
94 John Chrysostom, *An address on vainglory and the right way for parents to bring up their children*, transl. M. L. W. Lainster, in: M. L. W. Lainster (ed.), *Christianity and Pagan culture in the later Roman Empire*, Ithaca, NY 1967.
95 Clement of Alexandria, *Instructor*, A. Roberts, J. Donaldson (eds.), ANF, vol. 2.
96 Clement of Alexandria, *Instructor*, 2, 2, 25.
97 Clement of Alexandria, *Instructor*, 2, 11.
98 Clement of Alexandria, *Instructor*, 3, 5.
99 J. Ferguson, *Clement of Alexandria*, New York 1974, p. 72.
100 D. Brakke, *Athanasius and the politics of asceticism*, Oxford 1995, pp. 41, 43. The episode is present in the Catholic and Orthodox canon of the Bible (Daniel 13, NRSV Catholic Edition).
101 D. Brakke, *Athanasius* . . ., p. 43.
102 *Apostolic constitutions*, ANF, vol. 7, A. Roberts, J. Donaldson (eds.), 1, 9.
103 Epiphanius of Salamis, *Panarion*, in: K. Holl (ed.), *Epiphanius, Bände 1–3: Ancoratus und Panarion, Die griechischen christlichen Schriftsteller* 25, 31, 37, Leipzig 1:1915; 2:1922; 3:1933, vol. 1, 30.7.5.
104 P. Schaff (ed.), NPNF, the canons of the Synod in Laodicea, canon 30, the canons of the Council in Trullo, canon 77.
105 Clement of Alexandria, *Instructor*, 3, 8.
106 Clement of Alexandria, *Instructor*, 3, 8.
107 John Chrysostom, *In Acta apostolorum (homiliae 1–55)*, 30, MPG 60.
108 John Chrysostom, *In epistulam i ad Corinthios (homiliae 1–44)*, 36, 8, MPG 61.
109 John Chrysostom, *In epistulam i ad Timotheum (homiliae 1–18)*, 9, MPG 62.
110 John Chrysostom, *In Acta apostolorum (homiliae 1–55)*, 29, MPG 60. With a deal of heavy sarcasm, Chrysostom notices that more people than usual appear at the church during Easter – but at the same time, they make so much noise that it could hardly be called human behaviour!
111 John Chrysostom, *In epistulam ad Romanos (homiliae 1–32)*, 31, MPG 60.
112 John Chrysostom, *In epistulam ii ad Timotheum (homiliae 1–10)*, 14, MPG 62.
113 John Chrysostom, *In Joannem (homiliae 1–88)*, 61, 3, MPG 59.
114 John Chrysostom, *In Joannem (homiliae 1–88)*, 34, 3, MPG 59.
115 Theodoret, *Historia ecclesiastica*, 4, 13.
116 Eunomius' successor, Lucius, as Theodoret relates, evoked a similar, if not even more radical, reaction – the ball with which some boys were playing was "purified" in the fire after landing under the donkey on which Lucius was

riding. This apparent remainder of the old superstition, while not approved of, allowed Theodoret to further emphasise the Samosatenes' loathing of Arianism (Theodoret, *Historia ecclesiastica*, 4, 13).
117 P. Magdalino, "Medieval Constantinople", p. 33.
118 F. Yegül, *Bathing . . .*, pp. 203–204.
119 P. Magdalino, "Medieval Constantinople", p. 33.
120 P. Squatriti, *Water and society in early medieval Italy*, AD 400–1000, Cambridge 1998, pp. 44–53.
121 P. Schaff (ed.), *The seven ecumenical councils of the undivided church*, NPNF, the canons of the Synod in Laodicea, canon 30.
122 P. Schaff (ed.), NPNF, the canons of the Council in Trullo, canon 77.
123 P. Schaff (ed.), NPNF, the canons of the Council in Trullo, canon 11.
124 Sozomen, *Historia ecclesiastica*, 5, 2.
125 Gregory of Nazianzus, *Contra Arianos et de seipso* (orat. 33), 8, MPG 36.
126 Gregory of Nazianzus, *Contra Arianos et de seipso* (orat. 33), 7, MPG 36. The provincial background, despite his education, has caused the Nazianzen enough unpleasant moments that, in rhetorical exaggeration, he refers to it as a crime (for which he apparently continued to suffer).
127 E. Jeffreys, B. Croke, R. Scott (eds.), *Studies in John Malalas . . .*, p. 103.
128 Socrates Scholasticus, *Historia ecclesiastica*, 6, 22.
129 Sozomen, *Historia ecclesiastica*, 8, 1.
130 Novatians rejected the *lapsi*, Christians who did not withstand persecutions and made offerings to pagan deities – contrary to the mainstream Church, which allowed their re-admission after a lengthy penance. This harsh stance was sometimes extended to those who committed other grievous sins. The schismatic group was eventually declared heretical, and gradually disappeared.
131 T. T. Rice, *Everyday life in Byzantium*, New York 1967, p. 155.
132 John Chrysostom, *In epistulam i ad Corinthios (homiliae 1–44)*, 11, 10, MPG 61.
133 John Chrysostom, *In epistulam i ad Thessalonicenses (homiliae 1–11)*, 9, MPG 62.
134 John Chrysostom, *In Joannem (homiliae 1–88)*, 9, 4, MPG 59.
135 John Chrysostom, *In epistulam ad Titum (homiliae 1–6)*, 1, MPG 62.
136 John Chrysostom, *In epistulam i ad Timotheum (homiliae 1–18)*, 10, 12, MPG 62.
137 Procopius, *History*, 4, 4, 6–9.
138 John Chrysostom, *In Matthaeum (homiliae 1–90)*, 63, 4, MPG 57.
139 Ammianus Marcellinus, *Res gestae*, 28, 4, 24.
140 Modern-day Hungarian town Szombathely, near the Austrian border.
141 Ammianus Marcellinus, *Res gestae*, 30, 5, 16.
142 Ammianus Marcellinus, *Res gestae*, 29, 2, 28.
143 B. Cunliffe, R. Tomlin, *The temple of Sulis Minerva at Bath*, v. II: *Finds from the Sacred Spring*, Oxford 1988.
144 R. Tomlin, "The curse tablets", in: B. Cunliffe, R. Tomlin, *The temple of Sulis Minerva at Bath*, v. II: *Finds from the Sacred Spring*, Oxford 1988, ch. 4, pp. 59–277.
145 John Chrysostom, *In epistulam i ad Corinthios (homiliae 1–44)*, 12, 13, MPG 61.
146 John Chrysostom, *In Acta apostolorum (homiliae 1–55)*, 10, MPG 60.
147 While the concept wasn't a new one, it indicates Chrysostom's willingness to use tools other than pure persuasion to help his flock follow the right path.
148 Artemidorus, *The interpretation of dreams*, transl. and com. R. J. White, Park Ridge, NJ 1975.
149 Artemidorus, *The interpretation of dreams*, 1.64. This is the main section of the dream book devoted to bathing, and by far the longest entry on the subject.
150 Artemidorus, *The interpretation of dreams*, 1.76.

151 Artemidorus, *The interpretation of dreams*, 2.4.
152 Artemidorus, *The interpretation of dreams*, 4.41.
153 Artemidorus, *The interpretation of dreams*, 5.55.
154 *The Oneirocriticon of Daniel. The dreambook of the holy prophet Daniel with the help of the Holy God, according to the alphabet*, nos. 71, 74, in: S. M. Oberhelm, *Dreambooks in Byzantium. Six* Oneirocritica *in translation, with commentary and introduction*, Aldershot 2008.
155 *The Oneirocriticon of Daniel* . . ., no. 14.
156 Artemidorus, *The interpretation of dreams*, 2.3.
157 A. T. Crislip, *From monastery to hospital. Christian monasticism and the transformation of health care in late antiquity*, Ann Arbor 2005, pp. 30, 84, 91.
158 Procopius, *History*, 3, 15, 34.
159 A. Cameron, *Procopius* . . ., p. 173.
160 *The Mishnah*, J. Neusner (ed.), London, New Haven, CT 1998, *Abodah Zarah* 3.4.
161 S. Hoss, *Baths and bathing. The culture of bathing and the baths and* thermae *in Palestine from the Hasmoneans to the Moslem conquest*, Oxford 2005, p. 71; M. L. Satlow, "Jewish constructions of nakedness in Late Antiquity", *Journal of Biblical Literature*, vol. 116, no. 3, 1997, p. 435.
162 Y. Z. Eliav, "The Roman bath as a Jewish institution: another look at the encounter between Judaism and the Greco-Roman culture", *Journal for the Study of Judaism in the Persian, Hellenistic and Roman Period*, vol. 31, no. 4, 2000, pp. 416–454, p. 432.
163 S. Hoss, *Baths and bathing* . . ., p. 69.
164 M. L. Satlow, "Jewish constructions . . .", pp. 432–433; S. Hoss, *Baths and bathing* . . ., p. 75.
165 Y. Z. Eliav, "The Roman bath . . .", pp. 439–440, 449.
166 S. Hoss, *Baths and bathing* . . ., p. 76.
167 S. Hoss, *Baths and bathing* . . ., p. 76.
168 *The Mishnah*, *Ketubot* 7.8.
169 S. Hoss, *Baths and bathing* . . ., p. 79.
170 *The Mishnah*, *Taanit* 1.4–1.7.
171 *The Mishnah*, *Berakhot* 2.6.
172 S. Hoss, *Baths and bathing* . . ., pp. 81–83.
173 A. Berger, *Das Bad* . . ., pp. 78–80.
174 On *alousia*, also see F. Yegül, *Bathing* . . ., p. 206.

3 Bathing in medicine

Introduction

The chief aim of this chapter is to present an overview of medicinal uses of bathing recommended by Graeco-Roman medicine, with particular focus on Late Antiquity, and to examine briefly the similarities and differences between the descriptions of treatments that involved bathing as presented by the succession of medical authors. To the best of my knowledge, such a collection of remarks on the uses of water, primarily bathing and washing, in late ancient medicine has not been previously attempted. This collection itself differs from the rest of the book in that it takes the form of an extended list, rather than a more involved discussion on the subject. The uses of water in medicine are examined below from the perspective of bathing practices, rather than from a medical point of view. Lacking professional medical knowledge, I would rather avoid making excessively speculative guesses, and leave the assessment of the actual efficacy of the ancient procedures to those better versed in medicine in general and balneotherapy in particular. Assembling together the various passages and remarks on bathing will, hopefully, assist those interested in examining ancient therapeutic methods from a medical perspective. It should be mentioned here that I have limited the extent of medical subjects dealt with in this chapter by largely excluding from it the study of afflictions classed by the ancient authors as 'feminine' (chiefly gynaecological and obstetrical matters). I found this large and complex topic deserving of a separate study; since my study concentrates on bathing, analysing various gender issues that I would inevitably encounter would exceed by far its intended scope.

The extent of continuity in the medicinal uses of water and bathing throughout antiquity is quite remarkable – from the Hippocratic *Corpus* all the way to the compendia of Late Antiquity. This may be in part ascribed to the high degree of traditionalism (broadly speaking) in medicine, although it could be equally, if not more, likely to be the case of continued use of well-tested and familiar therapies. Doctors who considerably deviated from the usual regimens were negatively commented upon, and while some of them attained more widespread fame, occasionally a positive one, they remained rare, and

attracted attention precisely because of unusual methods of treatment; a few of these practitioners will be mentioned further in the text.

An overview of the comments about medicinal uses of bathing made by authors who were not trained doctors themselves, at the end of this chapter, is going to serve a dual purpose: it will provide an indication of how widespread medicinal bathing was in practice (hinting at the extent to which the written-down prescriptions were actually used). Furthermore, it will show the extent to which the society (or at least the more highly educated parts of it) was versed, if at all, in medical science.

It should be mentioned that, when approaching the task of writing this chapter, I considered attempting to identify the diseases described by the ancient authors using modern-day terminology. In a rare few cases, this was possible to accomplish without much ambiguity; however, due to lack of sufficient knowledge of clinical medicine on my part and major difficulties in adopting a sound methodology for this task, I decided to employ a more basic approach and presented the diseases and their symptoms by referring to the descriptions of the ancient authors. While I occasionally postulated an opinion about what the described ailment may be classified as by modern medicine based on the described symptoms, such assertions should be treated as little more than a layman's guesses, based only on cursory research. Retrospective diagnosis in general is recognised as an extremely difficult, perhaps impossible, if not downright counterproductive, endeavour, even for a medical professional.[1] K.-H. Leven argues that the change in pathogens, as well as the virgin soil phenomenon (making a population's first exposure to a pathogen often wildly different from subsequent symptoms), make correct identification of many of the diseases impossible. The only potentially beneficial use of retrospective diagnosis, according to Leven, is in attempting to create models that would help to imagine the overall impact of an epidemic. Such a cautious approach is, of course, less necessary in situations when clearly identifiable, unambiguous problems (such as injuries) are described, as their causes are clear (and often also irrelevant to the efficacy of the proposed treatment).

Washing or bathing were frequently only a minor element of the treatment; however, as this book's focus is specifically on bathing, I typically mention other elements of the therapy only in passing. The order in which the described ailments are arranged is dictated primarily by the type of bathing treatment used in therapy, and in the second order follows the traditional arrangement of the treatments as presented in the compendia (generally, following the order of describing treatments of various parts of the body from head to feet).

The secondary literature on Roman medicine is extensive; as my focus is on primary source analysis, I am going to use secondary material in a limited fashion, primarily to provide here a brief overview of the key features of Roman medicine in Late Antiquity – a basic context for the subject at hand.

Prior to Greek influence, the Romans did already possess a system of medicine, although it lacked organisation.[2] The impact of Greek medical science transformed it considerably, expanding the scope of treatments, introducing new terminology and resulting in a reshaping of medical Latin, effectively creating a 'unified' Graeco-Roman medicine[3] and resulted in the emergence of four major 'schools' of medicine ('methodistic', 'empiric', 'dogmatic' and 'pneumatic'). These approaches to the medical craft eventually came to be combined, and Galen (AD 129 – ca. 200) represents such a 'mixed' approach, referred to as 'eclectic' in the scholarly literature (although the presence of the traditionally established schools is well attested until much later).[4] A notable feature of Galen's writings was making frequent references to Hippocrates, aimed at supporting the 2nd-century doctor's own authority with that of the greatly respected physician of old. By the mid-7th century, practically all of Roman medicine was dominated by Galenism, with its theory of the three major systems within the human body (central to these were the brain, heart and liver respectively) and the assumption that health is dependent on the balance of the four Hippocratic humours (blood, phlegm, yellow bile and black bile). The Galenic approach was easily reconciled with monotheism (the belief that the cures were placed by the Creator on earth for humans to benefit from them), and therefore generally acceptable to Christians as well;[5] as is discussed later in this chapter, such views were even casually included into some of the Christian rhetoric.

Aside from the more famous professionals, many of the medical practitioners in the Roman Empire (especially those practising among the less well-off and taking care of slaves) were slaves themselves, often specially purchased and trained in the profession chosen by their owners. Training slave doctors was seen as a sound investment. Laws regulating prices of such slaves made their way into codes compiled during Late Antiquity, possibly indicating continuity of the presence of slaves in the medical profession,[6] however V. Nutton noted that there is a lack of references to slave doctors after the 3rd century (with the exception of the price mention in Justinian's code).[7] Medical training during Late Antiquity took the form of apprenticeships or more formal lecturing based on Hippocrates and Galen (with Galen's influence dominating, and colouring, interpretation of Hippocratic texts). The courses were generally set, and specific texts were taught in a standardised fashion.[8] There is substantial evidence for the involvement of women in medicine; however, it seems to have been largely restricted to obstetrics, and even in that area all the extant works on the subject have been written by men (the works of Soranus, the 1st–2nd century physician on gynaecology, are the prime example in this regard).

Overview of the sources

The texts examined here include – primarily – the work of Paul of Aegina (the author of the most widely read compendium of medical knowledge of

the time, *Επιτομής ιατρικής βιβλίο έπτά*, better known under the titles such as *Epitomae medicinae libri VII* or *De re medica libri septem*, of which the most useful for me will be books 1–4, heavily reliant on Galen and Oribasius), Alexander of Tralles (the 6th-century author), with references to Galen, Aetius of Amida and Oribasius (more on them below), but also to a considerable extent Hippocratic writings, the marked influence of which can be seen in the texts of all of the above. It may be noted here that we do not possess much information about Paul himself, beside the place of his origin, the fact that he was active in Alexandria and remained there after the Arab invasion in 642.[9] He was probably a Christian, and, aside from the compendium, he wrote several treatises dealing with podiatry – though none of these survive.[10] The impact of his work, however, can hardly be overstated; the collected medical knowledge assembled by Paul was extensively studied by both Byzantine as well as Arabic doctors, and was rediscovered in the West in the early 16th century, with the publications of the text in Greek in 1528 in Venice.

Some of the major sources for this chapter are the works of Galen, one of the most renowned Roman physicians and philosophers, born in Pergamum in 129. He died in Rome, most likely around 210. He is considered the creator of medical theory including an adaptation of Hippocratic humoral theory, and included in his treatises ideas taken from Plato, Aristotle and the Stoics. He became a source for Byzantine physicians, including, *i.a.*, Oribasius (discussed below), who, while writing his synopsis of Galenic medicine, was also including information on contemporary medical practice. This tendency continued through the encyclopaedias of Aetius of Amida, Alexander of Tralles and – ultimately – Paul of Aegina. Later authors not only quoted Galen's works, but also compared them with Dioscorides's (military surgeon during Nero's reign) *Materia medica* (which, incidentally, also provided Paul with much information for his seventh book on pharmacology). Such an approach was first adopted by Oribasius and continued to be used by most Byzantine encyclopaedists.[11]

Oribasius can be credited with transferring the doctrines of Galen into the Byzantine (post-Late Antiquity) period. He was born in Pergamum around 325, and died after 395–396. His life was the subject of one of the biographies of contemporary pagan philosophers by Eunapius of Sardis.[12] He was taught by Zeno of Cyprus, a well-known doctor and teacher of his day. He became a friend of Julian during the future Emperor's confinement in Asia Minor. In 355, he became Julian's personal physician and librarian. On Julian's order, Oribasius summarised Galen's works (this task was completed after 361), however, these particular works, unlike his *Collectiones medicae* (Ἰατρικαὶ συναγωγαί), have not survived. He accompanied Julian on the fateful expedition of 363 and was present at the Emperor's deathbed. Oribasius quoted verbatim from cited medical works and paired each quotation with another of similar content, not necessarily from the same tract or author, as is seen in his streamlining of Galen's writings. Oribasius' version of Galen was generally followed by Aetius of Amida and Paul of Aegina, and it was in such a

form that Photius (the 9th-century patriarch of Constantinople, perhaps best known for the compilation of extracts from nearly three hundred works), knew Galen's writings. Arabic physicians used Oribasius in translation, and by the 5th century he had been rendered into Latin.[13]

Aetius of Amida was one of the most renowned physicians of the Late Roman Empire. Born in the city with which he is associated, he was predominantly active around 530–560 and worked chiefly in Alexandria and Constantinople. He wrote an encyclopaedia of medicine, an impressive compilation of 16 books (which later also became known as *Tetrabiblion*), which included numerous quotations from earlier authors, both Greek and Roman, sometimes paraphrasing their text in a more accessible style. The work addresses all major medical issues known at the time.[14]

Any examination of medical writings from Late Antiquity would be incomplete without Alexander of Tralles. His father, Stephen, was a physician as well, and one of his brothers, Anthemius, gained great fame as the architect of the great church of Hagia Sophia in Constantinople. It is possible that Alexander's family knew Kosmas Indikopleustes, which could explain the numerous references to drugs from the Far East to be found in his work. Alexander's approach to medicine shows deep concern for the patients, focusing on diets, baths and exercise, and avoidance, where possible, of drugs with strong side effects. He modified treatments in consideration of the patient's individual needs and mental comfort. While Alexander displayed a practical approach to medicine, rejecting old cures that did not work regardless of who recommended them, he nonetheless accepted certain magical or folk cures for illnesses where standard treatments did not work, or when the patient refused them. This seems to have been a reflection of the daily practice of the day.[15] Alexander knew classical authors, but in his work the old theory played a secondary role to practical experience.[16] T. S. Miller noted that, along with other physicians of Late Antiquity, Alexander's influence (who not only introduced his own cures and treatments, but even occasionally criticised Galen) led to the introduction of complete bath-houses within hospitals, and that this development made overseeing treatments that included bathing considerably easier (as private doctors could only attend to several patients at a time).[17] It hardly needs saying that this development is of profound significance from the perspective of this work, as not only did it fully integrate bathing into hospital treatment, but also served to largely remove the patients from the more public bathing spaces (even if their presence had already been previously limited to set times).

The decision to also focus on the Hippocratic works, and to a non-trivial extent, perhaps deserves some explanation. The Hippocratic corpus lacks a single clear conceptual framework and the scope of knowledge it contains is extremely broad. The result is an unsystematic presentation of information; this is also characteristic of some of the particular Hippocratic works: aphorisms, sayings and maxims.[18] As for the question of the actual authorship of the *Corpus*, V. Langhof rejected it as misleading, pointing out that

it is essentially impossible to answer due to the nature of writing during that period. In this context, the lack of the concept of intellectual property, common reusing of material, the re-working of texts by other authors and other associated difficulties prevent authoritative identification of an original source.[19] These questions, however, do not change the fact that the *Corpus* remains the most important source of knowledge about early Greek medicine; and while that collection of texts was assembled and completed over a millennium before Paul's compendium, these works share a considerable number of similarities in the practical approach to particular ailments, particularly when the use of bathing, washing and water in general is concerned; there are, of course, some exceptions, and these will be discussed as well. Furthermore, the Hippocratic *Corpus* became a major source of inspiration for Galen, and many other physicians, during the Roman imperial period – and whose texts then, in turn, have been compiled by the medical authors of Late Antiquity and beyond (such as the discussed Paul of Aegina). Such transition of knowledge appears to have been typical of the period – various compendia and encyclopaedias gained in popularity as the authors strove to catalogue and preserve the ancient wisdom, largely copying and repeating what was already known – often leaving very little of their own mark on the compilation. J. Stannard went so far as to say that reading Paul's work might be like reading a text from half a millennium earlier, given the insignificant extent to which the medical works had changed.[20] By the 6th century, the most heated theoretical debates on human nature (and, by extension, the most efficacious ways of restoring patients to health) had become a thing of the past. Similarly, the efforts of medical authors seem to have turned from original research and its propagation (something in which Galen excelled) to perfecting the already known cures and treatments and writing extensive manuals, with only some practical adjustments. While perhaps this particular remark is now mostly of antiquarian interest, it might be worth noting that T. C. Allbutt blamed, in part, authors of such compendia for the subsequent loss of the more detailed works of earlier authors, as these were later deemed excessively wordy or unnecessarily detailed, and were simply not copied, due to the existence of their abridged versions.[21] On the other hand, it is precisely because of this process that one may treat such medical compendia as at least somewhat reliable indicators of the state of medical art among the majority of its practitioners who, while usually having access to the more commonly available encyclopaedias, would not have been likely to have ready access to the more highly specialised treatises, if only because of the high costs involved in procuring them.

There remains the question of the extent to which such compendia presented the current state of medical knowledge, and the degree to which they simply copied older authorities. The evidence of widespread study of the text indicates that the compendium remained a source of practical knowledge for the practitioners for a very long time. This does not, of course, mean that parts of the work did not become outdated or impractical to implement

over time – as a whole, however, the encyclopaedic and practical nature of the treatise meant that it remained easy to use for centuries after the date of its composition. It may be noted here that while the great majority of the compendium was derived from the earlier works, numerous remarks and comments in the book devoted to surgery indicate a considerable degree of personal expertise and constitute a significant original input on Paul's part.[22] V. Nutton referred to the medical authors of Late Antiquity as "refrigerators", encyclopaedists who have been previously studied purely for their contents, rather than their own, original input.[23] He proposed that they should be studied and evaluated on their own terms – by their ability to effectively convey their message; and observed that some of the physicians (such as Alexander of Tralles or Iakobos Psychristos, the "Cooler" – mentioned in the previous chapter in the context of his intercession on behalf of Isokasios) were putting forth new cures and therapies, without limiting themselves to the received wisdom of past authorities.[24] Moreover, he noted, the interest of F. Adams in Paul of Aegina was not purely academic – the medical knowledge contained in his work was still of practical relevance in the nineteenth century. In a more recent paper, V. Nutton also challenged the highly negative opinions of the later Byzantine medicine, arguing that the apparent lack of original thought and research post-7th century could at least to some extent be attributed to the lack of published editions of the extant relevant works, and therefore lack of familiarity with them among modern historians.[25]

Attitudes to medicine

Having partially examined the links between religion and medicine in the second chapter, in the context of religious attitudes to medicine and to miraculous healing linked with water and bathing, I wish to briefly return to that subject, this time from the perspective of links between medicine and belief in supernatural healing factors, with emphasis on places associated with healing (sanctuaries devoted to healing in particular).

In human consciousness, water and healing were inextricably intertwined from the earliest antiquity. A great number of temples and sanctuaries devoted to the gods of healing were located by, or incorporated, springs and water sources famed for their healing properties. It should therefore not be surprising, then, that the association between water and health was still strong during Late Antiquity, and indeed survived in many shapes and forms in Byzantine and Islamic cultures, its presence remaining in Western Europe as well; this trend was more recently (from the 19th century onward) revived in the Western world in the form of resorts and spas (to speak only of that part of the world; Japanese bath-houses, especially those using thermal waters, remain a popular way of relaxing to this day). Ancient examples of temple complexes that included springs or baths include Epidaurus[26] and Menouthis – the latter was eventually replaced by a Christian church (dedicated to the healing saints Cyrus and John) – a fairly typical example

of Christianising the sacred landscape.[27] Particularly useful in examining this phenomenon is the more than half a century old yet still irreplaceable *Balaneutike* by R. Ginouvès, discussing practically all aspects of bathing in ancient Greece, with nearly half of the main body of the work devoted to cleanliness and religious life in general, and a significant section to springs and baths associated with sanctuaries.[28] It is notable that so many of the earlier Greek healing sanctuaries and springs retained their status as places of healing in the later centuries, under the new, Christian guise. The cures offered in such sanctuaries (both pagan and Christian) ranged from those resembling Hippocratic or Galenic medicine, through magical, to ones that went contrary to common medical wisdom.[29] The line between scientific and religious (or magical) healing was blurred at best, as some medical authors used and prescribed magical treatments themselves. Religious healing one could expect in a Christian environment involved prayer, laying on hands, anointing, exorcism, making the sign of the cross and similar.[30] The question whether the aforementioned cult of saints at Menouthis was invented from scratch or merely fostered to overshadow the local cult of Isis remains; such measures may have appeared necessary to the local Christians, as the fame of the site attracted pagans for many years after the temple's closure. Many of the more than a hundred healing shrines from Italy (dedicated chiefly to Asclepius,[31] but also Diana of Nemi) were located directly by mineral springs. Perhaps one of the most famous sites of healing was the Asclepieion on Kos, located outside the city; the complex included three temples, fountains with sulphurous water, and later acquired Roman-style baths. The building works took place over the course of six centuries, starting sometime during the 3rd century BC. At Corinth, a small shrine was built in the vicinity of underground basins, and its location not far from the sea allowed the possibility of using it for bathing; evidence of at least ritualistic bathing is present. Off the coast of Attica, a sanctuary at Oropus was dedicated to Amphiaraos and Hygieia, and remained in use for a long time. The sacred spring nearby, interestingly enough, was not used for rituals, but attracted offerings in the form of coins. The shrine of Asclepius in Athens was built near a natural spring, and the site retained its sacred character during Christian times – as a location of a church to saints associated with healing, Cosmas and Damian. A temple to Asclepius at Aegae (Aigai) was razed, and replaced by a church in 331 AD.[32] Other major sanctuaries to Apollo were located in Epidauros, Gortyn and Pergamum. A similar transformation occurred in Rome itself, as the original temple to Asclepius on an island on the river Tiber was replaced by a church to St. Bartholomew and a hospital.[33] In general, the process of replacing the old deities with saints or angels was gradual, but the sacred, previously pagan, locations largely retained their 'supernatural' character.

It should be noted here that the treatments prescribed at such sanctuaries commonly included hot or cold baths.[34] Associations of Hercules as a 'helper' deity led to associating him with medicine as well, and Herculean motifs often appeared on both medical instruments and bathing utensils.[35]

The rise of Christianity changed attitudes to health and medicine to a certain extent: the general understanding was that illnesses should be cured, whether by medicine or prayer, but at least some Christians were prepared to accept illness as a means to keep their body, and its desires, under control.[36] While it is difficult to establish the views of 'ordinary' Christians, many of the Church authors expressed ideas on medicine, ranging from acceptance (with implicit or explicit statements on the dependence of the efficacy of cures on God's will), through cautious assent, to hostility – although the latter was quite rare.[37] Not all such apprehensiveness should be taken at face value, however; many of the stereotype-based stories in which the lay doctors fleece their patients without being able to provide them with a cure serve more as a build-up to saints' intervention and miracles than outright condemnation of medicine and its supporters (unless said supporters happened also to mock Christianity and its saints).[38] One such story has been passed down by Sophronius: Gesius, an Alexandrian professor of rhetoric, despite his baptism, mocked Christianity and claimed that the supposedly miraculous cures were simply taken from standard Hippocratic and Galenic medicine. After becoming ill, he was eventually humbled and cured by the saints Cyrus and John.[39] Stories of this nature tend to focus on the lack of belief in Christian saints' powers and 'faith' in lay medicine of those who are being criticised, and the superiority of Christian miracles is presented with unquestioning certainty. Distrust of medicine may have also partially stemmed from the high number of pagans among the medical practitioners, well into Late Antiquity.[40] It should be noted here that a fairly common way of obtaining an allegedly miraculous cure was to bathe in, or drink from, a (considered to be sacred) spring[41] – something, indeed, well within the parameters of lay medicine. As is discussed later in this chapter, *The miracles of St. Artemios*[42] provides other excellent examples (discussed in the previous chapter at greater length) of 'miraculous' cures being obtained by following advice or being subjected to treatment from a supernatural source that might have, otherwise, come from a medical practitioner (some, however, were cured in ways that are entirely outside of non-magical medical practice). On the other hand, even the predominantly lay medicine in antiquity was not free from certain 'supernatural' elements. One of the Hippocratic works, entitled *Regimen IV* or *Dreams*, differs from the other three *Regimens* in advising a regimen that is based on dreams of the patients, rather than on physical symptoms.[43] Its author believes that unusual dreams, ones that are in contrast to what can be observed when one is awake, signify problems with health. For example, when in a dream the stars, planets, moon or sun appear to be disfigured, have disappeared, are arrested in revolution or appear as through mist or cloud, it signifies problems with health caused by excessive moisture and phlegm.[44] A dry regimen is advised here, including vapour baths. Apart from unusual phenomena in the sky, the dreamer may also see floods (which indicate excess of moisture) or black and scorched land (which signifies that the body is too dry).[45] Accordingly, dry and moist regimens are advised, including numerous

baths in the latter case. Another group of unusual dreams includes ones in which "monstrous bodies"[46] appear, indicating a surfeit of unaccustomed food and calling for emetics, a light diet, hot baths and rest, and ones in which the dreamer sees enemy soldiers and strange monsters, which indicate disease or oncoming madness, in which case hot baths should be avoided. It is worth mentioning this work in the discussion; such an approach seems to have continued in some form or other throughout antiquity. Later dream books (such as the previously discussed book by Artemidorus)[47] employed similar 'methodology' and expanded it to predict good or bad events in general. What is perhaps most interesting about *Regimen IV*, however, is the general consistency of the prescribed cures with those listed in the previous *Regimens*, and the fact that the gods, while occasionally mentioned, are not being relied on here as a source of health – they are invoked only to aid in preventing a disease from occurring in the first place.[48]

On the other hand, religious medicine was not free from the influence of rational medicine, by any stretch.[49] Reaching back to Aelius Aristides (117–181), one of the most famous valetudinarians of antiquity, we find he strongly relied on the dream visions of Asclepius for his cures. These dreams would have been subsequently analysed by Aelius' doctors and friends, and the god appears to have possessed medical knowledge consistent with that of the doctors. Here, at least, the god does not provide healing directly (as he was deemed to do in descriptions from Epidauros).[50] Indeed, it seems to have been fairly common that the god's activity would be limited to diagnosing the illness and prescribing an (effective) cure.[51] I. Israelowich, however, observed that the temple priests themselves had medical training and, after all, they did oversee the application of the cures deduced from patients' dreams. Aelius also described an instance where a group of physicians at an Asklepieion was forced to admit that the effective cure prescribed by Asclepius was contrary to standard medical practice.[52] In Aelius' case this involved, e.g., bathing in winter in a cold river to relieve his bowel troubles.[53] The more intense rivalry between the supernatural healers (saints) and doctors in Late Antiquity, largely driven by the desire to present the former as both more effective and not seeking monetary payment as physicians were, had not yet been as highly pronounced as it became with the advent of Christianity. Nonetheless, the *topos* of the effective, supernaturally ordained cure being contrary to standard medical practice was already present.

It needs to be said that the salubriousness of the Roman public baths has been brought into question; the main arguments include insufficient flow of water to keep the communal pools clean, and the lead lining of pipes that caused poisoning.[54] N. Morley's paper provides a useful if brief overview of the subject,[55] in which he notes the disparity between the idealised picture of a Roman city emerging from treatises compared to the one reconstructed from archaeological evidence and casual remarks of Roman poets, suggesting that while the baths themselves might have been unhygienic by modern standards, they would still have contributed to the reduction of the number of potential

disease carriers – parasites – and that the freely flowing drinking water from aqueducts (often constructed primarily to provide water for the baths rather than specifically drinking water) would have been healthier than that provided from wells or rivers. It is worth keeping in mind that fairly often, as was mentioned before, the construction of an aqueduct was motivated by the necessity of providing considerable amounts of water to run the larger, more extravagant baths. The fresh drinking water was in such cases more of a (certainly welcome) concomitant benefit of the construction rather than its point, and therefore one may well add the availability of clean drinking water in many of the smaller cities to the list of indirect health benefits arising from the presence of bath-houses. Opinions that the bathing culture itself could have taught common citizens something about healthy living can also be found: I. Israelowich proposed that Roman bathing itself already incorporated activities and habits that were recommended by Hippocratic medicine, and the knowledge of the health benefits of natural springs was best evidenced by the crowds flocking to the most famous sites.[56] Not without merit, he argues that the development of health tourism had its foundations in the developments in bathing that occurred between the 5th century BC and the beginnings of the principate; and the stability within the extensive Roman state made it easier for its inhabitants to travel to famous healing sanctuaries.[57] From the patient's perspective, there was no apparent clash or opposition between the treatment and healing obtained at sanctuaries (which were largely compatible with Hippocratic medicine); likewise, dream visions were interpreted both at the sanctuaries and by physicians, in order to uncover the best cures.[58]

Furthermore, J. Scarborough's remark on the similarity between the careful planning of baths and the legionary *valetudinaria* (garrison hospitals) is worth mentioning.[59] The field hospitals included areas for bathing, and the impact of the experience of bath-house architects on the development of hospitals should not be underestimated. There is a clear interplay between the development of the two institutions, and in all likelihood it was the hospital that benefited more from solutions used in bathing establishments, and not *vice versa*. This should be kept in mind when considering the impact of baths on Roman medicine in general, and when associations between baths and healing are discussed. To what extent such similarities were noted among the general population is difficult to establish, but one can easily imagine that a veteran solider returning to his community would recall times spent in a *valetudinarium* when enjoying his afternoon bath.

There is some debate as to whether the institutions devoted to curing the sick in antiquity could be called hospitals. V. Nutton observed that public hospitals were first established by Christians, previous institutions being limited to the military or large estates.[60] If they are to be defined as having an inpatient facility, medical care and as being charitable institutions set up with the intention of benefiting the sick in general (as A. T. Crislip did),[61] then such a hospital would indeed only appear alongside Christian monasticism and charitable foundations. Based on such a definition, military and slave

infirmaries would not meet the criteria of being true hospitals. Regarding monastic hospitals, A. T. Crislip noted that they employed bathing for hygienic and medicinal uses (Pachomian monasteries only allowing full-body baths in the case of illness), with the patient bathing clothed (except for when the disease was clearly visible). There was an ongoing concern about the risk of sexually intimate situations arising while the celibate monastics cared for the sick, which explains the various restrictions.[62] T. Miller's definition of a hospital similarly denotes a facility with inpatient care, and the aim of healing patients through rational therapies (thus excluding hospices, almshouses etc.), and noted that the classical Graeco-Roman society did not maintain permanent institutions aimed at helping the poorest, or migrants who lacked standing within the community.[63] He also noted that the terms such as *xenon* or *nosokomeion*, which later became synonymous with hospitals, originally encompassed institutions with different focuses (such as hospices); Justinian's reforms extended to hospitals as well, and by the 7th century these institutions functioned much like the modern ones.

Importance of water in medicine

To speak of the health benefits of bathing, one should first examine the properties of the waters used for it; already for the earliest of the ancient medical authors, water was important for a variety of reasons: as part of the environment in which people live (especially in *De Aere aquis et locis*),[64] as a drink, as a requisite for bathing, finally as part of a human being (*De diaeta I*). A physician, in order to properly engage in his craft, needed to have been aware of a locality's natural conditions that had influence on its inhabitants. Bathing itself is also occasionally mentioned as one of the activities related to the medical profession in general. The Hippocratic author mentions arguments brought up by people questioning the validity of the medical craft: since the patients sometime get well without professional medical help, therefore it is luck, not medical help, that is the most important in getting back to health. The author in turn explains that the patient, unwittingly, might do the same thing as a physician would advise (bathing or refraining from it is given as an example) and regain health in accordance with the rules of the medical craft.[65] From all the possible measures that the ill person might have used, the author selected bathing to exemplify beneficial medical practices, showing at the same time its close links with medicine, pervasive availability and common associations in popular consciousness with health. In this section, I will provide a general overview of the professional medical view on the properties of water; first comprehensively written down in the Hippocratic texts, this understanding of water's influence remained relevance throughout Late Antiquity, and was universally adopted by the later authors with very few alterations.

The description of types of wind in *Airs* . . . mentions their effects on the water and provides a list of illnesses that are typical for places where

particular winds are dominant: hot, southern winds tend to make water more brackish, and people affected by such a climate tend to suffer from numerous diseases, though not from acute ones.[66] Cold, northern winds make water hard and cold, and the diseases that accompany them are acute;[67] eastern and western winds are the healthiest ones, and they cause few problems; waters that are affected by them are clear and sweet-smelling.[68] The worst situation is that of people living in cities sheltered from eastern winds but exposed to both northern and southern winds; according to the author, in such places mists are plentiful and, as they dissolve in water, they make it cloudy.[69]

The properties of water, however, seem to depend much more on the places from which they are drawn rather than on the dominant winds in the area; stagnant waters, coming from marshy lands, are described as having a tendency to be of a bad colour and smell and are considered to be the worst ones: people drinking them suffer from numerous diseases, their intestines are stiff and hot, which, in turn, makes them eat and drink much.[70] Waters coming from rocky terrains were also considered to be bad, as well as those from areas with hot springs or places where metals or minerals are abundant. Hard, and heating those who drink them, they cause constipation and are difficult to pass; but while the salty and hard waters are, in general, not healthy, they can be beneficial for those who have "soft bellies", that is, the "moist" and phlegmatic people, since such water will "dry" them up; the author also mentioned the popular belief that salty waters tend to be a laxative, but states that their effect is in fact the opposite. The waters that flow from earthy hills and high places are deemed the best, as they come from very deep springs; especially good are those that flow in an eastern direction. This passage is practically the only one that is specifically about spring water in the Hippocratic corpus. While according to Hippocratic texts healthy people can drink practically any kind of water, those whose organs get easily heated will benefit from the lightest and sweetest waters; also, such waters are best for cooking, as they are the most solvent. The finest and clearest of all is rain water,[71] but it is also the one to become foul most quickly, so it needs to be boiled and purified; the author believed that rain water's tendency to become impure comes from the fact that it is "gathered by the sun" (it evaporates) from many sources, which include people and animals. The influence of the sun produces coction (πέψις); this term appears in many of the books of the *Corpus*, and it is always treated as a positive sign; it usually refers to the "humours", which need to be in balance – and mixed – for the person to be in good health. Often used in association with digestion, in case of water, coction indicates that the sun has removed the impurities (which, according to the ancient author, then became separated as fog and mist). The waters coming from snow or ice were believed to be bad; an experiment is proposed: should water be left to freeze and then the ice melted, there would be much less water left than there was originally; the lightest, "best" part disappeared. This remark likely stems from the fact that water in a solid state has a larger volume than in liquid form. The author of *Airs, Waters,*

Places also believed that drinking many different types of water was bad for health, and, similarly, drinking water from lakes or rivers that are fed by multiple streams and sources was also deleterious. In such cases, the wind "strengthened" one of the types of water and made it dominant; such water tends to be thick and carry sediments, which results in kidney stones.[72] Later authors very closely followed Hippocrates when describing the properties of water; notes on them can be found in works of Aetius,[73] who in turn followed Rufus here, Oribasius,[74] Galen and – eventually – Paul.[75] Paul himself, copying Galen and Oribasius, provided what is essentially an abridgement of the Hippocratic overview, but adding after his sources that chickpeas (eaten, or drinking the water in which they were soaked), wild carrots boiled with small fish and fennel could alleviate the effects of drinking poor-quality water – as could beets and gourds consumed with salt and diluted wine.

In addition, the later authors categorised natural springs according to the dominant minerals present in their waters. Natural baths (or at least those using water from such springs) were said to provide a variety of benefits to the bathers, which in turn contributed to the growing popularity of health tourism as patients sought out the most appropriate place for their treatments. The types of water listed by Paul are: nitrous, saline, aluminous, sulphurous, bituminous, copperish and ferruginous; some of the springs were noted to provide mixed waters.[76] In general, the mineral-rich springs were said to have desiccant and calefacient (warming) properties, and were therefore considered most beneficial for the humid and cold temperaments respectively, and as such, they were prescribed for ailments that were believed to result from the excess of humid and cold humours, and used whenever desiccative measures were observed to bring good results. The exact effects each type of water had were listed as well: nitrous and brackish waters were said to be especially good for the ailments of the head, discharges originating in the chest, watery stomach, various oedemas, swellings and collections of phlegm. Aluminous waters aided those spitting blood, vomiting, and suffering from strong menstrual discharges and miscarriages. Waters containing sulphur soothed and warmed the nerves, relieved lassitude, but could also upset the stomach. Bituminous waters made the head heavy and dulled the senses, but provided a steady degree of heat, and had soothing properties. Springs containing copper helped for problems with the mouth, tonsils, uvula and the eyes, while iron-rich waters aided those suffering from stomach and spleen afflictions. Additionally, the patient seeking to gain the most from using these properties of mineral waters ought to immerse the whole body immediately, so that the initial effect of water would be the strongest: here, the curative effect was thought to depend on the "impression" the water made on the body, rather than absorption of the minerals from the water or the air. Properties of various types of waters are similarly listed by Oribasius[77] and Aetius.[78]

A rather different approach to water can be seen in the *Regimen*.[79] Here, the water was presented as part of the living organism: it is an element that nourishes everything, and is opposed to fire, which provides movement.[80] Neither

of these can exist without the other, both contain an element of the other one, and everything that exists is a mixture of the two. This idea was in more than one way similar to the concept of yin-yang dualism, especially when one considers the obvious parallels: fire seems to be the 'male' and water the 'female' element. In general, the perfect mix of the two elements was considered to produce the most intelligent (or sensible) people; dominance of water makes people slow-witted; that of fire, intelligent, but not constant, and in extreme cases susceptible to madness, or at least prone to displaying highly irregular behaviour.[81] In *Regimen* II[82] it is explained that, when used in bathing, fresh water has moistening and cooling properties, while salty water tends to warm up and dry the bather.

Apart from the remarks in *Airs, Waters, Places*, the different properties of different types of water seem to be ignored in other Hippocratic works, except for a section devoted to drinking water in *The use of liquids*.[83] Fresh water is said here to be the best for use in surgery and in making medications. When applied to the skin it will moisten the body, and may be used for cooling or warming but, by itself, it has no other properties. This meant that it was easy for the doctors to decide when the water should be used externally, as there were relatively few regimens and treatments when a minor moisturising effect would have been considered harmful. A more detailed list of uses of water is listed here as well: the water may be used for moistening ulcerated skin, washing out nostrils, or, taken internally, help with dealing with some bladder ailments. It may be used either to promote the growth of tissue, but also to reduce and diminish it; however, no specific details as to how to achieve such effects are given here. Similarly, it might be used to "restore colour, but also to dissipate it";[84] again, no further details on how to do it are given. Water poured over the head and other parts of the body was said to promote sleep, to soothe convulsions and spasms and to ease pain. According to Hippocratic texts, water may be used for warming the body in practically all cases, except when the patient is suffering from bleeding sores. It also has uses in treating dislocations, fractures and other ailments when bandages are commonly used, and for treating headaches. There are also a few words of warning: while moistening the patient is deemed to be a "weak" measure (and therefore it should neither be very beneficial, nor harmful if used improperly), cooling and heating are said to have strong effects. Another remark advises what seems to be common sense: too much heat may be harmful for the patient, as well as excessive use of water in general: it might result in "softening of tissues, powerlessness of the cords, paralysis of judgement, haemorrhages, loss of consciousness",[85] and even death. Therefore, it is important to observe how the patient reacts to the treatment and to modify it accordingly.

Regimen in health

In this section, I explore the medical principles and assumptions that were used to design a regimen (guidelines to a healthy lifestyle) for people who did

not suffer from any particular diseases. The main focus, of course, is going to be on bathing, although other elements of the advised regimen for healthy people are also mentioned. This general summary of various uses of bathing is, to a degree, a condensed form of treatments using water included in the Hippocratic *Corpus*, but the similarities between these and particular regimens and therapies prescribed by later authors are impossible to overlook; many of the following examples attest to that quite clearly.

An important remark concerning the modes of bathing can be found repeated quite a few times in the *Regimen in acute diseases*: a sudden change of treatment, or of the habits of the patient, may cause them more harm even than the somewhat improper treatment or diet he is used to; the same rule applies to bathing.[86] Both the frequency of bathing and the way in which the patient prefers to bathe were to be taken into consideration when the physician was to decide about changes in the bathing regimen. This advice is occasionally repeated in the later texts as well.

How should the patient bathe? The earliest description of bathing facilities and activities is included in *Regimen in acute diseases*. For a bath to have a positive effect on the patient, it must fulfil certain requirements: the place itself should be free from smoke (which could come from both heating the water and the room in which the patient was to bathe, since at the time of Hippocrates the air in baths was heated with braziers) and have an abundant supply of water; also, bathing attendants should be present and ready to assist the patient in bathing. Only in such conditions will the bathing do more good than harm to the ill person, and in such cases it may be frequent, but always performed in a calm and relaxed manner.[87] Rubbing the patient with soap (which was a paste of olive oil and alkali, such as ash) should be avoided; if soap was to be used, it should be warm and used in much greater amounts than usual, and with large amounts of water applied during and after using soap (or perhaps before and after the soap was used, but that would not explain why there should be so much of the soap in the first place; it could also be that the patient should not be exposed to it for a longer time). The passage to the bathing basin should be short and permit easy ingress and egress; unfortunately, no other description of the basin (one can assume a typical bath-tub) is given. The bather should be quiet and passive; all the activities, such as pouring the water and rubbing, ought to be done by attendants. The latter remark is noteworthy, for throughout antiquity bathing attendants assisting the sick were commonplace, and important enough to be given special significance in dream books – as was discussed in the previous chapter. The water should be tepid; instead of a scraper, sponges were to be used; the body should be anointed before it is dry, while the head should be rubbed with a sponge until it was as dry as possible. The extremities, and the head and body in general should be kept from the cold. No food or drink should be given to the patient immediately before or after the bath.[88] This model of bathing was intended for patients who were seriously ill; the healthier ones did not require such cautious treatment.

The Hippocratic regimen for healthy people gives advice on how people should act according to season.[89] Other such regimens follow the pattern set by the great predecessor.[90] While Paul did not mention bathing specifically, his remarks on the need to restore the proper temperature to the body when it is either too cold or too warm clearly suggest the use of a bath. In general, the most humid regimen was deemed the most beneficial in summer, and the driest during winter; therefore, bathing ought to be the most frequent in summer and the least frequent in winter.[91] *Regimen III* states, more specifically, that in winter cold baths should be taken after exercises in the *palaestra* and hot baths after all the others; during spring and autumn warm baths are advised, and tepid ones during summer.[92] Some additional notes on cold baths were added by later authors. Paul, in the chapter already mentioned,[93] stated that cold baths are beneficial in general, but only for people who live correctly. They are best used during the warm season, and the bather's body ought to be heated by exercise. Cold baths are not advisable for people in the state of lassitude (e.g. after intercourse), in cases of indigestion, after vomiting, after evacuation of bowels, or in lack of sleep; they may prove to be dangerous if used irregularly.

In addition, lean people ought to bathe more often than the "fleshy" ones, as they are drier by nature; similarly, the "soft" and fleshy people tend to benefit more from a dry regimen. The use of emetics was also deemed to have positive effects when administered during the winter half of the year.[94] The procedure of taking them starts with a hot bath, and includes drinking a cotyle (approximately a quarter of a litre, close to half a pint) of wine, eating a hearty meal and having a rest before vomiting. Oribasius[95] and Paul[96] made further mention that it was beneficial for the patient to wash his face after vomiting, as this brings a feeling of relief to the head, and to flush the mouth with fresh water to remove the stomach acid, to prevent damaging the teeth.

Working people who are suffering from fullness caused by excessive eating combined with insufficient exercise, ought to go to the baths, where they can get themselves rubbed, and do some exercise or, if that is already being done, simply eat less food.[97] Alexander noted that patients fainting from a surfeit ought to have their limbs treated with rubbing, warming and constricting, while keeping away from wine, food and baths should they also have fevers.[98] Paul's additional note on the regimen for travellers mentions anointing as beneficial during a journey, as it helps to endure fatigue.[99]

In the case of actual obesity (which was not given as much attention in the Hippocratic writings), a number of actions may be taken; many of these involve bathing. The body ought to be reduced, by means of heating; exercise, medicines and mental anxiety are all helpful as well; rubbing with oil containing the root of wild cucumber or gentian is also advised. There should be a period of abstinence from food after bathing, which ought to be followed by sleep instead. The water used for bathing should be diaphoretic (that is, allowing or inducing easy perspiration), preferably from a natural source (Mitylene is mentioned here as a place with particularly suitable waters).

Should the patient be unable to use such waters, he might do with sea water mixed with flower of salt,[100] or large amounts of nitre in the bath. Diuretics and cathartics may be used as well. Such treatment is advised by Oribasius,[101] Aetius[102] and Paul;[103] Galen[104] offers a slightly different therapy: after exercising, the patient should be wiped dry, rubbed with an ointment, then bathed and finally be allowed to rest or engage in a desired activity. At this point he may eat as much food as he wants to, however, it should not be very nourishing.

A contrary treatment is advisable to those who are emaciated: the patient ought to bathe before eating food, and be rubbed with linen before entering the water, until the skin is reddened. After the bath, hard but slow rubbing of the skin will make it harder.[105] To help the patient restore an emaciated part of the body (e.g. after it was injured and immobilised), it is good to resort to rubbing and pour – in moderation – warm water on the patient.[106]

Later authors added some further details, focusing on temperaments; for example, the excess of 'heat' in a patient was attributed to the (yellow) bile; bathing (especially after meals) and walking were deemed sufficient in such cases, at least for some; other patients also needed to exercise. If the heat was seen to be accompanied by dryness, the patient was considered to benefit most from succulent food, baths and (rather limited) exercise. In the summer, a bath would need to be taken early and after a meal. Patients showing signs of both hot and humid temperaments should especially use a bath before eating, two or three times a day, and the amount of consumed food should be reduced in quantity as well; natural hot baths were deemed to be the best in such circumstances. Additionally, in such a case, promoting excretions by exercise and baths (and some medications, more liberally prescribed by later medical authorities) was deemed beneficial as well.[107]

For cold temperaments, the doctors were advised, in a fashion similar to the oldest guidelines, to prescribe everything that was deemed to heat the body: among the prescribed cures were, again, such activities as bathing, exercise and a proper diet. The cold and dry temperament was deemed to be the worst for the patient, and therefore such a person needed to be "humidified" as well (for that purpose, bathing, especially in fresh water, was the best possible solution).[108]

In the chapters detailing regimens designed for various temperaments, Paul included, as the first element of any treatment, lengthy descriptions of bathing procedures. He specified that dry temperaments benefit from long, tepid baths (although in cases where the dryness is inherent, and not resulting from diet, it cannot be cured permanently). The procedure he mentions involves bathing, having a drink afterwards, a period of rest, taking another bath and rubbing the body with oil. The interval between the baths ought to be four to five hours, if the patient was to receive a third bath that day. Taking into account the uneven length of ancient hours (twelve from dawn until dusk and twelve from dusk until dawn, regardless of time

of year), Paul specified that he is referring to their length at equinox, and therefore the hours he uses correspond to modern ones. Before putting clothes on, the patient should be rubbed with oil (to help retain the water in the organism). In the case of moderate dryness, a less rigid diet may be used. In this case Paul did not differentiate the dryness of the body according to its "temperature", and bathing is no longer mentioned. It is clear, however, that the regimen is generally the same as with more serious "dryness" of the patient.[109]

Generally speaking, when the various regimens advise to give the patient water as the only drink, this advice usually corresponds with situations where the patient would benefit from bathing in sweet (fresh) and soft waters, ones that were believed to increase the patient's general 'moisture'.

Afflictions and conditions for which bathing was advised in general

In this section, I discuss cases in which bathing was deemed a generally desirable activity. Such cases were plentiful, and the particulars of bathing varied considerably between diseases; hence the further division of the section, based on the recommended type of water to be used. As was indicated before, the following sections of this chapter constitute an overview based on the reading of the sources, rather than a detailed discussion.

Bathing in fresh water

In theory, bathing in fresh water was a simple way of moistening the patient, and (depending on the circumstances) of warming or cooling the body. Furthermore, it allowed relaxing of the patient's body – an effect desired in most illnesses, if not for direct therapeutic effect, then for the patient's overall feeling of comfort and well-being. Bathing was also seen as a way of aiding recuperation. The frequency with which such treatment was prescribed, and the wide range of ailments accompanied by it, should not be therefore surprising. One of the earlier chapters in Paul's compendium is devoted to treating intoxication; this was to include vomiting, bathing, unction and rest; such a course of action is advised by both Oribasius[110] and Paul.[111] The unpleasant aftereffects of drinking wine in general may have been eased with exercise, friction, bathing and limiting the amount of food consumed.[112] Others who gave advice on this matter suggested similar measures.[113]

In another of the early chapters of his work, devoted generally to beneficial activities suitable for healthy people, Paul notes that sexual activity ought to be preceded by exercise, or a bath.[114] This advice was taken from Oribasius, but other authors were of a similar opinion.[115] Galen and Paul also provide advice on the treatment of excess of semen: should men affected with it abstain from sexual activity, they will become feverish and have troubling dreams. The patient will be relieved if he takes a bath and has his loins rubbed with an oil of either roses, apples or unripe olives.[116]

In his chapter devoted to baths in general, Paul lists some of the milder, everyday affections that can be helped by bathing in warm water, which, according to him, relieves lassitude, dispels plethora (excess of blood, or sanguine humour), warms, soothes, softens, removes flatulence, promotes sleep and introduces plumpness. He sees warm baths as the best and proper for any person.[117] This information seems taken directly from Oribasius[118] and Aetius.[119] In a similar context, Galen informs that baths may well be taken in the morning, but on condition that the bather ate little the previous evening.[120]

Paul's comments on lassitude caused by exercising are quite developed: he distinguished four types of lassitude, in almost all cases advising the use of tepid baths; the patient should then stay in the warm water for a longer while. Repeated bathing brings greater effects. In cases when the patients' muscles are constricted, hotter water should be used, and the bather ought to immerse himself in cold water immediately after the hot bath; rubbing and a light diet complement the therapy.[121] This fragment is taken directly from Oribasius,[122] and is very similar to that of Aetius;[123] they can be traced back to Galen (who, as discussed below, seems to have drawn heavily from earlier tradition himself).[124] In cases when the skin appears pale and is constricted, Galen advised intensive exercises and the hottest baths, followed by only a brief exposure to cold water.[125] This advice is repeated by Oribasius[126] and Paul.[127] It may be noted here that while Paul generally avoided theoretical remarks and focused on practical advice, the positive effect resulting from the bathing prescribed here is in line not only with medical practice, but also with the principles of humoral theory. Jumping into cold water with one's eyes open was supposed to have a positive influence on the eyes themselves.[128] This advice is similar to the Hippocratic remark about rapid immersion of the body in curative waters. It should be noted here that Hippocratic medicine devoted much attention to curing various fatigue pains, in which bathing played a significant role.[129] Those who were unaccustomed to training were to benefit most from vapour and hot baths (πυρῖῃσι καί λουτροῖσι θερμοῖσι) and also from gentle application of oil to the body (soft massage). Those who trained regularly but have overstrained themselves would be helped by hot baths with rubbing, but they do not need the vapour baths. Should the patient suffer pains from exercises to which he is not accustomed, the case might be more serious: fever, shivering and pain will appear if he is not treated. Such a patient ought to be bathed by someone else in a moderately hot bath, without too much water. Apart from that, he ought to take a light diet, some purging and plenty of rest, gradually returning to a normal regime over the course of six days.

Sleeplessness among people who have no other health problems is to be treated, according to Paul, by bathing, especially if the bath is taken in the evening.[130] As was often the case, Paul was following Oribasius' advice.[131] In addition, including large quantities of lettuce in the diet was believed to be very effective as well, due to its humidifying properties. The desire to relax the patient's body prior to sleep is obvious here.

A different section of Paul's work focuses on various types of pain not accompanied by fevers, first and foremost, headaches.[132] Depending on the cause of the headaches, different measures should be employed: if the pain was caused by excessive heat, the patient should be treated by cold water ablutions. If the cause of headaches was cold, then hot baths were advised. Pain arising from bilious humour, similar in symptoms to pain caused by heat, but also characterised by pains in the stomach, paleness and occasionally a bitter taste in the mouth, was best treated with tepid baths. The treatment is prescribed without an in-depth explanation for the reasons behind it, but it is well in line with the basics of humoral theory. Alexander's advice is similar, with warming methods (including baths) featuring among treatments for headaches caused by yellow bile.[133] Migraines caused by bile were, likewise, to be helped by warm baths, along with a diet of mallow, lettuce and a humidifying regimen. Migraines caused by thick humours were to be alleviated, along with rubbing in of plant-based medication, by infusions, immediately followed by baths.[134]

Treatment of melancholy, when it was thought to be arising from the brain, was thought to significantly benefit from frequent bathing; a similar therapy was believed to help for mania.[135] Alexander suggested hot baths, with warm water poured over the head, and rubbing of egg yolks into the scalp. Treating the body with water mixed with oil, and anointing the head with rose oil, were also deemed beneficial. Moderate drinking of wine following bathing was to follow. Pleasant and gentle foodstuffs and fresh-water baths, especially after bleeding the patient, were also advised.[136] Again, the relaxing and "balancing" effects bathing would have for such patients need hardly be mentioned here.

Even many centuries after Hippocrates, physicians still had problems with recognising some of the less common "ailments", as may be shown in the example of what Paul referred to as love-sickness. Due to incorrect diagnosis, some physicians apparently prohibited, among other things, bathing to the lovesick; the proper regimen for such patients, Paul argued, involved bathing, drinking of wine, physical activity and amusement in general – the goal here is clearly to distract and amuse the patient, while attempting to relieve the anguish.[137]

In the case of acute diseases, ancient medicine considered bathing to be especially beneficial for diseases seated in the chest. Among the benefits of bathing were soothing the pain in the sides, chest and the back, concocting and bringing up sputum, easing respiration, removing fatigue, softening the joints and the skin, relieving heaviness of head, and moistening of nostrils.[138] Washing in hot water and hot baths were advised for almost every one of the lung afflictions, including damaged bronchial tubes (for which the patient, if he survived, should be washed with hot water, unless the pain is very strong, in which case cooling was advised),[139] pulmonary oedema,[140] pulmonary varices,[141] swelling of the lungs,[142] tuberculosis,[143] for a separately listed condition arising from gathering of fluid within the lung,[144] or one characterised

by pain in the back, groin, fever chills, breathing difficulties, coughing up yellow-green sputum, and occasional presence of blood in the urine.[145] If the patient was suffering from pulmonary oedema and the physician was not sure where to make an incision to draw off the liquid (when no swelling was visible), he was advised to first bathe the patient in hot water.[146] In general, washing with hot water was prescribed before drawing off the fluids that were accumulating in the lungs, although when tuberculosis affecting a side of the lung was described, washing was not listed among the curative procedures – instead, after draining the lung for ten days, the physicians were advised to inject warm wine with oil into the lung, and to repeat this infusion for five days.[147] A very similar treatment for removing pus in pneumonia is mentioned earlier – the length of time for which infusions should be repeated is not listed there, though it contains a clarification that the infusions should be made twice a day, in the morning and in the evening.[148] Washing the patient in copious amounts of hot water should be done here before the physician's attempt to locate the best place for making the incision. The illness described as erysipelas of the lung, however, was to be treated, among other measures, with bathing in cold, rather than hot, water.[149]

Generally speaking, if the patient was to obtain benefit from bathing, liked to bathe and there were no serious reasons for him not to do so, he ought to engage in the activity, even twice a day.[150] On the other hand, if the benefits provided by bathing were not necessary, he should abstain from it, especially if he showed symptoms indicating that bathing was not going to be appropriate for him. The author of *Affections* stated that hot baths used in moderation soften and promote growth of the body, but used in excess, they moisten the dry parts of the body and dry the moist ones. When the dry parts are moistened, they bring weakness and fainting; when the moist parts are dried, they produce dryness and thirst.[151] As this advice is very general, and rather obvious, it is not always possible to trace whether the later physicians were following it, or simply used common sense and experience when writing their own treatises. Hippocratic texts also suggest bathing for those who are about to have an enema or take an emetic.[152] Similarly, the body should be softened by hot baths if the patient is suffering from bowel obstruction.[153]

Curing of infertility consisted to a large extent of keeping the body in the right condition, by removing any humoral imbalances. This was possible to achieve by a adopting a healthy regimen, including appropriate bathing habits. A couple's sterility, overall, was deemed to be mostly caused by the woman's problems, for which the cures tended to consist of baths and unguents. Notably, however, the fault was likely to be on the man's side if he was either too fat, or too emaciated.[154]

Hippocratic advice for the patients suffering from a phlegmatic disease, characterised by general weakness, and vomiting of saliva and bile, was that they should bathe in a small amount of hot water and then bask in the sun.[155] This is a rather straightforward example of applying the general rule that

illnesses arising from what was believed to be an excess of one humour could be treated by promoting the opposite qualities in the patient.

Paul mentioned a disease called lycaon or lycanthropia, which is described as making the affected people act like wolves and stay near sepulchres during the night. Further symptoms include paleness, poor vision, dryness of the eyes and tongue, lack of saliva and thirst, and ulcerated legs, the result of frequently falling over by those affected by the illness. Description of the therapy states that at the beginning of illness it may be cured by severe bloodletting, followed by baths in fresh water, wholesome foods, purging and theriacs (complex, multi-ingredient drugs renowned for their alleged efficacy as antidotes or even as a panacea), and followed by the cures used for melancholy. If the disease is at a later stage, the patient should receive soporific embrocations (lotions or liniments rubbed into skin), and have his nostrils rubbed with opium before rest.[156]

Patients suffering from toad poison should, after the initial treatment, engage in a lot of walking and running, and bathe daily, to counteract the possible lethargy induced by the poison.[157] Following a somewhat similar rationale, patients who drank an excessive amount of poppy juice were to be given emetics and cathartic enemas; after being administered further medicines orally, the patient ought to be bathed in hot water, and given strong-smelling substances to smell, for further stimulation. The bath may be followed by high-fat-content broths or wine.[158]

Before the setting of a dislocated shoulder, the patient should be bathed, so that the relaxed body undergoes the treatment more easily.[159] Similarly, patients who suffered spine injuries should be bathed (to relax the body) before attempts at correcting the dislocation are made.[160]

Bathing in sea water, mineral waters, waters with added substances

In the following section I examine the treatments that involved bathing or washing the patient in water with various additions. These could be of plant, animal or mineral origin, and in some cases were used together. It can be safely assumed that such treatment would have exclusively taken place in an individual bath-tub (if full body immersion was desired), or even a bowl (if only a part of the body was to be washed). As noted earlier, mineral waters were considered to have additional properties when used for bathing when compared with pure water. The wide range of ailments for which the various water types, as well as water with additives, were considered beneficial, clearly reflects this assumption.

Discussing a regimen suitable for the elderly, Paul notes that they benefit especially from various heating measures, and for them, the best time to bathe is soon after midday (after the seventh hour).[161] This advice is repeated after Galen,[162] and similar remarks can be found in the works of both Oribasius[163] and Aetius.[164] Paul and Oribasius also provided guidelines for preparing the bath that is especially suitable for the elderly: it should contain rosemary,

pyrites, salts, burnt lees of wine, nitre and pumice stone. Other useful ingredients include mustard (added in a small quantity), stavesacre (*Delphinium staphisagria*) and seeds of thymelaea.[165] The bath should be followed by sweet and warming drinks and wine.

The subject of very strong chills and rigors in fevers was discussed at length by various authors; Paul noted that Archigenes (1st–2nd century) stated that for some of the patients, a bath of hot oil helped, and that Galen recommended rubbing the patient with various substances.[166] F. Adams listed works of Galen that deal with the subject, and notes that the advice of Celsus mentioned taking a bath and that Aetius, similarly to Archigenes, advised applications or bathing in oil, noting that castor oil was best for this purpose.[167]

Giving advice on dealing with cephalaea and hemicrania, under which names he discusses various forms of persistent headaches,[168] Paul noted that people of humid temperaments might benefit from natural baths.

Bathing and washing was considered by Paul to be the best cure for most of the afflictions of the eyes – at least when the patient was suffering from pain, the body did not require purging, and the inflammation was receding. Other authors also devoted significant attention to eye afflictions.[169]

Copious hot discharges were to be best treated with iron (II) sulphate (referred to as copperas) dissolved in water, which was then to be used for washing the eye. Treatment of subconjunctival haemorrhaging (hyposphagma, rupture of the veins of conjunctiva, most often caused by strong impact) was to be treated by washing the eye with the blood of a wood pigeon, common pigeon or in warm human milk, with dissolved frankincense. Ocular emphysema, according to Aetius, was to be treated by fomentations applied with a sponge, by pouring hot water over the head and by baths. Sclerophtalmia (when the sclera reduces the area of the cornea's transparency) was to be helped with fomentations with sponges freshly taken out of hot water. Xerophtalmia, or the inability to produce tears, was to be treated with baths, unguents and a wholesome diet; in addition, Galen recommended fomentations with hot water, or a decoction of poppies. Getting rid of lice that took hold in the eyebrows involved clearing away the lice, followed by washing the area in sea water, and by further applications. Mydriasis, an excessive dilation of the pupil, with accompanying worsened sight, was thought to be caused by an excess of one of the humours, and the therapy involved bleedings, cupping at the back of the head and washing the patient's face with sea water, brine or oxycrate (mixture of water with vinegar). Curing phthisis, atrophy of the eye (involution of the eye), was to be achieved by general exercise, careful rubbing of the head and the eyes, and by bathing the face with water; in addition, ointments should be applied to the head. This treatment in many ways resembles the general regimen prescribed for other weakened and atrophied body parts. For amaurosis, or dimness of sight, the patients were to use ointments, although it was important for them to immerse the eyes in hot sea water before applying the ointment. The condition in which the eyes were partially forced out from the eye sockets (as can

happen during excessive effort), or ecpiesmus, was to be helped by pouring cold, salty water over the patient's face. Alexander's recommendation for treating discharges from eyes, ulcers under the eyes and several other afflictions included warm baths and washing eyes in warm water.[170]

Apoplexy (generally corresponding in description to symptoms of a stroke; although the term could also mean a loss of consciousness arising from other causes) is commented on at some length by the Roman authors. The fairly complex treatment described by Paul allowed the patient to be bathed once three weeks have passed since the attack, and advises bathing in warm water to speed up the recovery. The treatment of paresis (paralysis of part of the body), following a stroke, depended on whether the patient's state was improving; if that was the case, and the richer diet led to visible improvement, the patient was allowed to be led to a bath. Bathing then becomes an essential part of the treatment after the thirtieth day since the apoplexy. After cataplasms or rubefacients were used to treat the affected limb, the swelling that this might have caused was to be treated with bathing, but the patient was to be led to the baths with much care: either carried, or transported in a hand-pulled vehicle. If swelling was absent, natural bathing (in natural springs, which generally meant highly mineralised waters) was suggested. If the paralysis was combined with relaxation or distension of the flesh, the suggested treatment was to pour hot water over the patient, preferably water taken from the sea, with astringent substances, such as marjoram or bay-berries boiled in it before the application. In the summertime, the patients could simply swim in the sea. For the convalescence period, bathing in natural cold baths was again prescribed.[171] Apoplexy was also mentioned in the Hippocratic *Aphorisms*, however without a particular treatment regimen.[172]

Paul advised taking hip-baths to alleviate the pain for patients suffering from tenesmus. The water should be boiled either with a mix of fenugreek, mallows or linseed, or, alternatively, with bramble, myrtle, flowers of the pomegranate, bays and green cypress shoots, mixed in equal parts.[173]

Similarly, soothing – and frequent – hip-baths are suggested for those suffering from kidney stones, with additional fomentations and other relaxing and soothing measures. Paul also suggested drinking tepid water after the bath and before eating. Patients with abscesses in the kidneys are, likewise, to be helped with hip-baths, especially of oil mixed with water.[174] In a similar vein, an aposteme (abscess) in kidneys was to be relieved with hip-baths of oil and water.[175] Alexander's advice on treating kidney stones involved dried and powdered goats' blood (to be crushed after cooling), or crushed cicadas (without legs or wings), which were then to be administered externally in a cold room whilst the patient was being bathed. It differed from a similar treatment for bladder stones, which ought to take place in a warm part of a bath-house.[176]

Similarly to the earliest Greek suggestions, in certain kidney diseases bathing was discouraged, and was to be replaced by anointing.[177] In general,

though, Hippocratic texts advised bathing in large amounts of hot water for many kidney diseases.[178] Alexander further recommended giving patients warmed-up medicine to drink as they are to enter a bath.[179]

Ileus in Paul's work is described as similar to colic (unless the affection of the colon arises from acrid and pungent humours). The patient is to be put in a hip-bath of hot oil. The cures for ileus and colic are similar, but the measures used for the treatment of ileus may be more drastic due to the more serious nature of the disease.[180] Hippocratic advice on treating ileus is similar.[181] Alexander's treatment of colic indicated use of fresh-water baths, particularly for those of "warmer" temperament and in peak age. Moderate temperature of both water and air was recommended, and the patient was to avoid drinking wine directly after bathing, and rather partake of barley water (or wine that was strongly diluted).[182]

Cachexia, wasting of the body, which was linked with early stages of oedematous afflictions of the stomach, was to be treated with natural baths: nitrous, aluminous and sulphurous waters were deemed especially appropriate.[183]

A full oedema, after an initial therapy of diuretics and general measures aimed at removing excess of humidity from the organism, was to be treated with natural baths or sand-baths (but only these; other types of bathing were not to be used). The patients were advised to sprinkle their bodies with powdered nitre, salts, mustard, and lime and similarly desiccative substances before going into a bath; these could also be rubbed in dry, or mixed with oil.[184] Illness described as erysipelas of the lung, however, was to be treated, among other measures, with bathing in cold water.[185]

The treatment for jaundice, as described by Paul, depended on a number of factors. If it occurred suddenly in a febrile disease, it diminished the fever, and was a sign of crisis, and could therefore be quickly removed with baths and friction, but did not otherwise require intervention. In more serious cases, bathing is not mentioned specifically. When jaundice arose from a warm imbalance, then gentle friction, moderate exercises, unction and bathing were suggested. If the bile was lodged in the vessels of the face and eyes, an injection of *Ecballium elaterium* (squirting cucumber, a purgative) was suggested, mixed with human milk, into the nose while the patient was in the bath. Following that, the patient should immediately immerse himself in the water, with the exception of his head; and after the bath, further therapy should follow.[186] The older authors suggested bathing both as one of the main modes of treatment, and as a means of increasing the effectiveness of laxatives and diuretics.[187] Hippocratic treatment for jaundice included bathing as well, along with a high-fat diet, for a period of three days, after which it should be stopped and purgatives and diuretics were to be employed; the patient could also be washed in water with an infusion of the root of squirting cucumber.[188] The use of this plant seems to have remained equally popular for treatment of jaundices since the time when the Hippocratic corpus was written. More severe cases were possible to be treated with hot baths, as long as the patient was not at risk of dying.[189]

Patients suffering from elephantiasis, in its earliest stages, were prescribed a complex, active regimen which included bathing, whilst the patient was anointed with either juice of fenugreek, ptisan or small amounts of substance known as ammoniac (most likely a gum resin of *Dorema ammoniacum*) dissolved in vinegar. In the bath, substances like decoction of beet, of fenugreek with aphronitrum (calcium nitrate), or soap or myrobolan (variety of gooseberry, *Phyllanthus emblica*, or *Emblica officinalis*) may be used as ointments, and depilatories may be applied as well.[190]

For patients suffering from pruritus (itching), Paul advises bathing before all meals, and occasionally also after the meal; this is due to the disease's nature, which makes it difficult to moisten the patient's skin. In addition, rubbing with various decoctions and applications is advised. Baths are recommended also for cases where the illness is protracted. Aetius added that sulphurous baths were especially beneficial.[191]

Patients who consumed the sardonian herb (*Ranunculus sardous*, or hairy buttercup), which was described as causing disorder of the intellect and contraction of lips (giving patients an appearance of laughter) were to be treated as follows. The therapy involved inducing vomiting, giving honeyed water with milk, rubbing and warming measures, hot baths of oil and water, and rubbing and anointing after the bath. Apart from this, the poisoning was to be treated as for other convulsions.[192]

Conditions in which bathing was allowed under specific circumstances

Aside from diseases and conditions in which bathing was generally desirable, there were some in which bathing was considered useful, if sometimes risky. In this section I explore the advice related to such ailments, making note of the particular restrictions that were to be applied to bathing.

A condition described as ulcerous lassitude was identified separately from other types of lassitude, and was to be treated differently; in the more serious cases the patient was to rest, drink moderate amounts of wine, eat light foods and take a tepid bath in the evening. If the ailment was even more severe, bathing was prohibited, and bloodletting ought to be employed, unless the patient was too weak for that. This treatment is advised by Galen,[193] and repeated by Oribasius,[194] Aetius[195] and Paul.[196]

For fevers, while hot baths were generally discouraged by physicians, in some cases they were deemed beneficial. If the fever was caused by fatigue, the patient was to be rubbed softly with oil and bathed. Alexander of Tralles noted that many patients suffering from fatigue-related fevers often rushed to a bath on their own, and that physicians frequently prescribed bathing in such cases as well. Alexander deemed it a common mistake, as only those who are otherwise healthy would benefit from it, while others were at risk of developing a worse, "rotting" fever, associated with putrefying humours. Alexander stressed the importance of correct diagnosis before prescribing bathing. Thus patients suffering from brief fevers caused by exhaustion can

benefit from cooling and moistening, and even partake in two baths on a given day with good results.[197] If the fever was caused by dryness (*xerotes*), the treatment was similar, though it involved more bathing and less rubbing. For fevers caused by worry, watchfulness, grief or anger, bathing should remain the same as what the patient was used to; treatment consisted of rubbing the affected person with large amounts of tepid oil. Fevers arising from external heat are best treated by various cooling means, including more frequent bathing. Oiling and friction should be limited, and the best oils to use are rose oil or cold oil from unripe olives, without addition of any salts. Bathing should only take place after the worst part of fever has already passed, and baths should be similarly employed after frostbite (κρυοπάγημα). For fevers combined with catarrh, bathing should only occur after concoction took place, unless the fever was caused by heat.[198]

For fevers characterised by a faint and irregular pulse, very high body temperature and poor digestion, it was advised to promote secretions from the body (urine, sweat etc.);[199] for that purpose, using tepid baths of drinking water was deemed helpful, and advised. However, in accordance to the general rule, if the fever was too high, the baths should be avoided, unless the signs of concoction were already visible, and the patient was of a hot and dry constitution to begin with – in which case he might be put into a cold bath. With only a moderate fever and signs of concoction visible, the use of baths was allowed, as well as drinking of wine and unctions "of a rarefying nature".[200]

For tertian fevers (diseases with fevers recurring in forty-eight-hour cycles, such as, for example, certain strains of malaria in the modern day), characterised by agitated yellow bile and stiffening of the body in the early stages of the illness, the prescribed bathing was to take place in warm water, without the addition of salts, nitre or mustard. Two, or even more, baths per day were allowed (provided that the signs of concoction appeared), if the patient was fond of them. Paul made a note that this treatment was effective prior to his time, but that in modern times the daily regimen has changed, and the bile becomes mixed with phlegm, due to poor diet and little exercise, and the therapy needs to take this into account; bathing should therefore only be used after concoction.[201] Alexander's advice is similar; he goes as far as to call bathing the greatest cure for such fevers, most beneficial to those of a hot and dry temperament. Warm ablutions after brief sweating were deemed optimal, to be followed by application of oil. Alexander's rhetorical question highlights here the need to use water in fevers.[202]

The so-called spurious tertians were to be treated with tepid baths, but only after signs of concoction became visible. Galen noted that these spurious (or bastard) tertians were connected with diseases of the spleen, and recommended venesection and warming of the body; this advice was repeated by the later authors.[203]

In cases of quartan fever (attributed to the excess of black bile), as well as quotidian, continual and hepialus (intermittent) fever, Paul did not

specifically mention bathing,[204] although Alexander did refer to warm baths in treating quartans; in particular, when these are caused by overheated yellow bile, addition of oil to bathing water was deemed helpful, along with other soothing measures.[205] The semi-tertian fever, which is a mixture of tertians and quotidians, is treated in a similar way; there is a warning here that the symptoms of this fever, apart from shivering, may vary, due to its nature.[206]

In case of a synochous (continuous) fever, accompanied by effervescence of blood, Galen's advice was to abstain from bathing, while Aetius allowed bathing on the fourth day (presumably the time when the inflammation was expected to pass).[207] Alexander was of the opinion that bathing may be beneficial in this type of fever, as long as it was not associated with indigestion (in fact, overeating and overusing baths could lead to fevers, through excessive cooling of the liver and stomach).[208] Otherwise, bathing was deemed to be helpful for both the fever, as well as for cold and dry dyscrasia, if applied correctly. Alexander then discussed the appropriate temperature (it should be moderate), oiling of the patient, and advised feeding the patient barley gruel after the bath.[209]

In case of ardent fevers, characterised by blackened, dry tongue, watchfulness and pale excrement, the cure involved evacuating the bilious humours, and bathing was allowed only for patients who did not suffer from inflammation or swelling caused by erysipelas (skin infection). Cooling the patient through washing with a sponge and pouring cold water on him, and cold drinks and applications, were generally recommended.[210]

For strictly erysipelatous fevers, bathing was strongly discouraged, although at the fever's peak the patient was supposed to be given very cold applications, and if that proved insufficient, internal cooling was to be used as well.[211]

The hectic (recurrent) fevers, as Paul described them, are seated in the fluids, spirits and solid parts, and therefore the affected might not even recognise that they have a fever, as all of the body parts are equally heated.[212] Curing such fevers, when inflammation was present, involved primarily a moistening diet. External cooling applications could be used in more extreme cases, and bathing was an appropriate measure at all times.[213] Galen advised against bathing patients who showed symptoms of inflammation and putrid humours, but in all other cases of hectic fever, cold bathing was deemed the best cure. In addition, cold drinks and applications to the affected parts and internal cooling (such as giving the patient lettuce) were recommended.

Similarly varied to the treatment of fevers, Paul's treatments of fainting differed considerably depending on the identified causes; in some cases, bathing was discouraged altogether (which will be discussed later in the text). If the fainting was accompanied by cholera (interestingly, cholera seems to be a secondary problem here), with diarrhoea or vomiting, the physician was to further encourage vomiting; bathing the patient's stomach with

warm or hot water was to help during discharges; this advice was also given by Alexander, who noted the beneficial effect of hot baths in cases of diarrhoea.[214] However, Paul also cautioned that bathing would aggravate any haemorrhages and sweating present. Similarly, bathing was best avoided if the patient was fainting from plethora. If the fainting was caused by the heat, bathing was advised. Should the fainting be a result of a prolonged stay in a bath, though, the advice was to simply sprinkle the affected person with cold water.[215] If the fever was caused by exposure to cold, the body should be moderately warmed, and the head should be washed in oil of iris and of nard. If the skin became constricted during fever, bathing the patient in fresh, tepid water, along with rubbing, was advised. For fevers arising from hunger, the patient should be bathed after the first paroxysm had passed, and then plentiful tepid oil should be poured on the patient, which should be accompanied by gentle rubbing. The patient should then keep soaking in the warm bath.[216]

For lethargy in general, which was described as arising from cold and humid phlegm affecting the brain, the Roman authors considered bathing beneficial during convalescence.[217] A Hippocratic *caveat* seems to have been omitted, though: there, even washing of the patient was discouraged for patients suffering from a particular form of lethargy which resulted in the patient's death after seven days.[218] Potential reasons for this omission may include lesser emphasis on case studies, or the anecdotal character of the Hippocratic remark; or it may have simply been left out for the sake of brevity.

If cholera was identified, and the patient was suffering from pains and nausea after eating, he should be bathed only after he finished digesting. The patient could then be put into a bath whole when the disease was receding.[219] Galen's additional suggestion was to bathe the patient in cold water, but only if the patient is strong. In the chapter on cholera (nausea), Alexander recommended treating patients who were nauseous due to overeating by bathing after the morning defecation (but only if the patient was not suffering from fever as well) and by a gradual diet (with attention on not allowing the patient to suffer from indigestion).[220]

An illness with symptoms described as inflammation within the windpipe that caused a risk of suffocation, was to be treated in the following manner: if bloodletting did not bring immediate relief, then, among other things, physicians were advised to pour hot water on the feet of the patient. Only when the disease was in decline were exercises and bathing allowed.[221] Paul included in the same chapter advice for treating strangulation – it is interesting to note that the Hippocratic aphorism[222] suggesting the physician refrain from attempts to save the patient once part of the signs of life stopped and foam appeared at the mouth had been brought up here, and the advice was repeated in a more direct way than in the original text.

Paul's advice on the treatment of gout and arthritis varied, depending on the humour that was believed to have caused the affliction: when it was from bilious humour, baths in drinking water were suggested, unless there

were reasons other than discharges to avoid bathing in general. Pains caused by sanguineous humour were to be helped by immersion in hot water. If cold was the cause, frequent bathing should be avoided, and the patient should be rubbed with nitre and other unguents after the bath.[223] Galen suggested abstaining from warm baths, since while they provide temporary relief, they tend to exacerbate the disease in the long run.[224] Alexander, however, considered fresh-water baths, particularly taken in the evening, beneficial, especially for patients of a slim and dry disposition. Both the water and the environment should be warm, and after bathing the patient should abstain from drinking wine (especially one not mixed with water), and eat barley gruel instead. Addition of sodium and salt was also deemed beneficial.[225]

Paul stated strongly that while for the majority of cases of inflammation bathing in warm water is advantageous, it should be avoided when tendons are affected, and proposed bathing the affected place with thin, tepid and non-astringent oil. If the tendon was exposed, using oil should be avoided, and instead the area ought to be kept dry with soft wool wrapped around a probe. Applications of oil should still be made to nearby areas (e.g. armpits, head, neck or groin area if a leg was affected). Bathing should be avoided for as long as the inflammation was present, but if the patient strongly desired to bathe, the affected body part should be prevented from coming in direct contact with water (cold even more so than hot). If the area was impossible to be kept dry during the bath, it should be protected by means of a thick, oiled compress and plasters; these multiple, protective layers should once again be coated in oil before the patient entered the bath. For injuries of tendons in which the skin was not damaged, the affected body part was to be washed with warming oils.[226]

Paul devoted a separate chapter to the treatment of patients suffering from poisoning with cantharides (or, to use more correct terminology, *Lytta vesicatoria*, the Spanish fly). After the patient's stomach and the bowels have been evacuated, he may be bathed in fresh water – but only at the later stages of the treatment, as bathing may be harmful earlier on.[227] As with almost all advice in his fifth book, Paul took this information from Dioscorides.

Bathing that should be done on specific days or stages of the treatment

In Paul's work, the general guidelines for bathing patients suffering from looseness of bowels caused by fevers were fairly simple: if the discharges were acrid, bathing was considered to be good, but only after the concoction (crisis, a turning point, usually a sudden one, in the course of a disease) took place. For patients with watery discharges, consisting of 'phlegm', abstaining from baths was deemed better, unless their use was important for other reasons.[228]

Epilepsy was to be treated with, among other things, purges, followed by bathing; the patient, however, was advised to avoid frequent baths. In certain

cases the patient ought to avoid drinking strong or undiluted wines after taking a bath and avoid remaining in the bath for a long time.[229] Alexander suggested avoiding bathing for a day or two after the patient was given medication made from *Veratrum* (false hellebore). Otherwise, he also advised avoiding drinking neat wine and too frequent (once or twice a week, after exercise) bathing.[230] Epilepsy might deserve additional attention here, as this disease received a lot of attention in the ancient medical texts, especially in the Hippocratic corpus. The author complained about various charlatans who, discussing the so-called "sacred disease" (the name given to epilepsy and similar illnesses), would hide their ignorance of its nature and call the disease sacred, attributing it to the gods, and forbid, among other things, bathing the patients.[231] For all it was worth, the extra caution when it came to bathing patients suffering from epilepsy seems to have survived until at least Late Antiquity, if in a more relaxed form.

As was previously discussed, apoplexy and losses of consciousness were among the afflictions for which the timing of the patient's bathing was particularly important.[232] Likewise, taking baths was advised in pleurisy (pleuritis), but only when the symptomatic inflammation was already in decline. Cold baths were to be avoided.[233] There is no distinction made here between the possible causes of the inflammation of the pleura; it is treated as a separate condition.

Bathing was also discouraged in typhoid fevers, during its early stages, though after about three and half weeks[234] the patient was to start receiving more nourishing food and take baths to strengthen the body. Alexander commented that the bath should be administered at home, the patient's entire body should be submerged in warm water, and the bathing should be performed without disturbing the water in any way. The patients should not be completely devoid of strength, as only then the bath will bring them relief.[235] A malignant disease, bearing some semblance to typhus, was described in another Hippocratic work – after the initial treatment, and only after fever and pain have disappeared, the patient was to be bathed in plentiful hot water.[236]

A few more brief examples of the importance of the timing of bathing: post-operation treatment of an abscess of the womb included hip-baths of warm oil, water or decoction of mallows; the patient should be put into such a bath on the third day after the operation.[237] Before surgical removal of leg varices, Paul suggested the patient should be washed, and after ligatures have been tied on to the legs, he should be made to walk, so that the affected veins would become more prominent.[238] Almost identical treatment is given by Aetius, with a note on the possibility of the use of cautery.[239] Finally, Paul noted that occasionally fractured bones will not grow together properly, and as one of the causes for this he gives overly frequent bathing of the limb, or various other disturbances; the treatment, which was also to counteract emaciation, involved nourishing food, warming of the affected limb and bathing of the whole body.[240]

Conditions treated by washing a part of the body

In some cases, washing or bathing only a specific part of the body was deemed to be advantageous from the medical perspective. In some of these conditions, bathing in general was not otherwise forbidden; in others, it was to be limited to the affected area.

In pure water

For patients affected by catarrh with rhinitis, caused by hot imbalance of humours, the cure is identical to that for headaches caused by the same – bathing and pouring large amounts of hot water over the head. In addition, Galen's advice for the patient was to breathe the fumes of acrid medicines.[241]

The protrusion of bowels ought to be treated with applications which should be used only after the intestine was reduced and washed in cold water; Paul noted that this condition occurs most often in children. Numerous possible applications are listed, one of them specifically for adults, and they were to be used unless the disease had already lasted for a long period of time. A precaution is added that the patients should abstain from frequent bathing, certain foods and significant effort.[242]

It is interesting that neither Oribasius[243] nor Paul[244] mention bathing as part of the treatment of injuries caused by the cold; the Mediterranean climate did not offer many opportunities to study such cases, or to treat them. The following sections of both of their works, however, do mention washing the face, legs and hands in cold water when the patients have been too long in the sun. Alexander's advice for ear aches caused by cold wind or baths was to apply warmth though usual medicinal means.[245]

A Hippocratic text mentions that washing in warm water should help for various pains in the head,[246] ears[247] and the body.[248] Hot baths should also help in certain diseases, some of them serious, where pain of the head is present.[249] In a disease where one of the symptoms is ulcerated skin of the head, the treatment involves washing it in hot water and then avoiding bathing for the next three days. When the ulcers actually do appear on the head, hot baths and application of ointment is advised.[250] Paul also noted that ulcers that have not yet suppurated were to be treated with applications and tepid water poured over them.[251] In another disease attacking mainly ears, hot baths are advised as well, but only when the fever and pain remit.[252]

Relating advice for getting rid of the parasite *dracunculus* (or Guinea worm, *Dracunculus medinensis*) taken from his sources, Paul lists washing skin with warm water as a means of drawing the parasite to the surface of the body, from where it could be pulled out over a longer time[253] (the latter method is still the most common treatment nowadays).[254] Immersing the ulcer caused by the parasite in water, however, could cause contamination of the water with parasite larvae, although the ancient texts do not address this;

it is difficult, however, to ascertain whether the suggested therapy would have contributed to spreading the disease further.

Discussing treatment of rabies, Paul suggests washing the afflicted (bitten) body part; the sore resulting from applying escharotics should also be washed in a decoction of camomile and the root of wild dock (most likely that of *Rumex crispus*).[255]

For poisonous spider (φαλαγγίον) bites, frequent baths are advised, as they relieve the pain. The bitten areas in particular should be washed with hot sea water; various decoctions should be administered orally as well.[256] Mushroom poisoning was to be treated by inducing vomiting, and administering medicines; in addition to emetics, a hot hip-bath and barley flour applied to the abdomen were deemed beneficial for cases where there was a risk that the mushrooms might cause internal ulceration.[257] This treatment is reminiscent of the Hippocratic case study, when bathing and sweating seem to have helped a girl suffering from mushroom poisoning: after drinking honeyed water, she was put into a warm bath. She subsequently vomited out the mushroom and sweated, before making a recovery.[258]

Discussing burning (cauterising) of the eyelids with medicines, Paul notes that it should be avoided, but in cases where it is necessary, the resulting eschar (slough) should be carefully washed off.[259] Similarly, in cases where separating the eyelid from the eye by incision was necessary, the area should be washed after the incision is made.[260] In a similar vein, describing the operation for cataracts, Paul mentions washing the eye with water right after the perforator is removed.[261]

Discussing fractures of the arm, Paul mentioned Hippocratic advice[262] to only bathe the limb with tepid water and use bandages for seven days before using splints. Should complications, such as inflammation, arise, the arm should be gently rubbed with oil and bathed in warm oil daily, until the problem subsides.[263]

In water with added ingredients or in other substances

One of the treatments for paleness, given by Oribasius[264] and copied by Paul,[265] is boiling almond fruit in water and washing with it.

Sleeplessness caused by fevers was discussed separately from cases affecting patients without other symptoms, and the treatment was quite different: rather than using relaxing baths, washing the patient's forehead with a decoction from black poppies was advised, at the time when the paroxysms caused by the fever subsided.[266]

Describing how to deal with excessive sweating, Paul mentioned a treatment proposed by Archigenes, that is, bathing the patient's abdomen in the juice of plantain, coriander, purslane or cabbage, as they were believed to have antiperspirant properties.[267]

Paul's text characterises "phrenitis" as an inflammation of the membranes (of the brain), caused by the excess of blood, of yellow bile, or by the yellow

bile turning black (which was supposed to be the worst case).[268] This affliction was accompanied by watchfulness, and the treatment should include anointing the head with oils, occasionally with hot fomentations, but the patient should not be given hot water to drink. Further treatment included binding the patient with ligatures after bathing and friction. If the body was squalid and hot, then the patient should be bathed in fresh water even if the fever remained, and he should be treated with anointing and given weak wine to drink. The general Hippocratic advice was to wash patients suffering from phrenitis with warm water.[269] Alexander likewise advised bathing, in particular mild baths in a temperate room and water. As a minimum, patients should be washed, to alleviate dryness, sleeplessness and irritability.[270]

Convulsions (spasms) were believed to arise either from plethora, or from depletion (exhaustion); the ones caused by depletion were deemed more dangerous. If there were no reasons to prevent the patient from bathing, a tepid hip-bath with added oil was suggested, along with gentle friction.[271]

Some of the notes on the treatment of tetanus include the following advice: if the attack continues for a long time, the patient needs to be put in a hip-bath of oil, twice a day, but for a short period of time, as with all the possible measures, oil baths were considered to be the most weakening.[272] Two case studies from *Epidemics* mention tetanus: the first one describes how a man who suffered from a sprained thumb, after the inflammation ceased, went to work in the field. When he was going home, he felt pain in the lower back and then he bathed; his jaws became fixed together in the evening and he died on the third day.[273] The same case is described again in a later book,[274] and only here is the disease named. In both cases bathing is merely mentioned among the actions of the ill person and the link between bathing and the worsening of health and death of the patient is uncertain.

For patients suffering from dysentery, in cases when there is a strong imbalance caused by hot humours, after the initial treatment bathing in fresh water may be allowed. If the bathing caused flux, bread or sponges soaked in Ascalonian wine, or other astringents, should be applied to the abdomen, and the patient should take his baths with the applications.[275] One of the case studies in the Hippocratic *Epidemics* describes how bathing might have helped a man who was suffering from a long bout of dysentery; on the seventieth day from the start of his disease, he took a bath towards the night and sweated afterwards. Since the description of the case ends almost right after this remark, without the mention of either death or curing the patient, it seems plausible to assume that the patient lived. Sweating, most probably caused by the bath, should then be seen in this case as positive and leading to health.[276]

Paul's compendium contains a rather detailed course of treatment for colic afflictions: if the pain is persistent, the patient should be made to sit in a hip-bath of the decoction of fenugreek (*Trigonella foenum-graecum*), marshmallow (*Althaea officinalis*), chamomile, mugwort (*Artemisia vulgaris*), dill, bay and similar plants. Alternatively, they may sit in a hip-bath of warm oil or in oil and water. If the pain still does not subside, natural baths should be

employed, but bathing in drinking water should be avoided, unless the pain (and, presumably, the lack of nearby mineral springs) makes using it necessary. Enemas should be followed by bathing; also, fomentations should be made in the baths, because of their heat.[277]

Various genital problems were also to be treated with washing: testicular *aphtae* (ulcers), for instance, were to be helped by applications of Cimelian earth with water, which, after drying up, should be washed off with warm water (prior to applying a cataplasm). Pruritus (itching) of the scrotum was to be helped by anointing it with a finely ground nitre, stavesacre, dried figs and moist alum mixed in vinegar and rose oil, which should be rubbed in the bath; following the bath, the area was to be rubbed with an egg white mixed with honey.[278]

An involuntary discharge of semen may be cured by hip-baths of the decoction of lentisk (resin of the mastic tree, *Pistacia lentiscus*), bramble and similar plants in wine or water.[279] A number of other ailments relating to the genital and excretory organs could also be treated with washing and bathing. Swelling of the penis was to be treated by bathing it with cold sea water; one of the cures for haemorrhoids (for patients suffering from copious discharges) involved making a compound medicine with which the area was to be washed seven times a day, for a period of three or four days. Similarly, *procidentia ani* (rectal prolapse) was to be helped by washing with young wine, before applying astringent medicines. In addition, washing the area with the patient's still warm urine was beneficial.[280]

Chapters sixty to seventy-three of the third book of Paul's work are primarily concerned with gynaecological conditions, for which various hip-baths are among the chief suggested cures.[281]

The suggested treatment of chilblains (also known as perniosis, ulcerous affections forming on toes and fingers caused by cold and humidity) was to wash the affected area in tepid sea water or the decoction of beet, or lentil, of bitter vetch or of the root of King's Spear (*Asphodelus luteus*); this was to precede further applications.[282]

Paronychia, an abscess forming at the foot of the nail, according to Paul should be treated by removal of the fluid after suppuration and applying a sponge soaked in water to the damaged area afterwards. This remedy is followed by two suggested treatments for the affliction called pterygium of the digits (flesh grown over part of the nail), caused by whitlow or similar conditions; one of them consists of bathing the digits in a decoction of thickening substances to harden the flesh, which can be subsequently removed.[283]

Brief advice from Hippocrates states that bleeding lesions (specifically, resulting from treatment of ulcers) ought not be moistened, but washed with vinegar instead.[284]

Erysipelas, Paul advised, should be treated with cooling measures; applications should be kept wet, for example by cleansing with wet sponges. Should the skin become livid, incisions should be made, and subsequently treated with applications of either fresh water, sea water or brine. Galen suggested

fomentations of hot water, which may include salt or vinegar, should the skin become livid after initial cooling applications.[285]

For sprains and contusions, Paul advised using various applications, administered with the aid of either unwashed wool, or through a sponge. In addition, pouring fresh or hot sea water over the affected body part was advised. After both pain and inflammation subsided, rubbing could be used.[286] Oribasius was the earlier source suggesting pouring water, as it is not mentioned in Aetius' work.

Spreading and putrid ulcers were to be washed with vinegar and oxycrate, or astringent wine, cold water, sea water or decoction of lentil, pomegranate rind, flowers of wild pomegranate, lentisk (mastic resin from *Pistacia lentiscus*), myrtles, Egyptian thorn, or another astringent or desiccant medicine. In addition, depending on the particular type of ulcer, various applications were available.[287] For ulcers that developed in the joints, use of desiccative medicines and bathing in sea water and brine were suggested by Paul; this advice appears to have been taken from Oribasius.[288]

Treatment of ankylosis (here described as contraction of joints arising from impacted humours or nervous tension, thus defined differently to the modern usage of the term) involved washing the afflicted body part with water and a previously boiled mixture of oil, in which mixed in were linseed, fenugreek, marshmallow, bay, the root of the wild cucumber and Sicyonian oil. This was to precede further applications.[289]

For scolopendra bites, Paul advised applications, and washing the bite with brine and vinegar.[290] A similar treatment was prescribed for shrew mouse bites (the brine used for washing should be warm).[291] Reptile bites, in a like manner, ought to be treated with applications, and baths in general.[292] Viper bites, however, ought to be treated somewhat differently: the treatment should begin with washing of the bitten area with a decoction of trefoil or of pennyroyal or with brine mixed with vinegar. After a blister is formed, it should be drained, and subsequently washed in copious amounts of water.[293] Paul advised that wounds caused by "sea dragons" (perhaps *Trachinus Draco*, L., greater weever?) should be washed with human urine, and the patient given medicines orally. Modern first-aid treatment for injuries caused by weevers involves putting the affected body part in hot water, something Paul does not mention.[294]

Washing of the operated area with oil and wine is mentioned as an anti-inflammatory measure in the description of hypospathismus, that is, surgical removal of copious and hot discharges from the eyes (the name of the procedure was derived from the instrument used to perform it). The washing should take place on the day following the operation, with more copious pouring suggested for the third day after the procedure.[295]

Surgical treatment of ankyloglossia (tongue-tie), as for many others, was to be followed by washing of the area, in this case with cold water or oxycrate.[296]

Discussing treatment of abscesses, Paul noted that if the operated area is heavily bleeding, applications of oil and water or cold wine and water should

be used, and on the second day after the operation, the area should be washed again with the same liquids.[297] Alexander advised fresh-water baths with addition of oil.[298]

One of the methods of treatment of phimosis, involving making incisions of the foreskin (in cases where adhesion has not taken place), was to be followed by washing the operated area with tepid oil, to further help with drawing out the prepuce.[299]

If the patient was suffering from bleeding after kidney stone removal, compresses of oxycrate or of water and rose oil were to be applied; the patient should be allowed to recline, and the operated area should be frequently washed.[300] Washing was also an important part of post-operation treatment for hydrocele (accumulation of fluid in a body cavity, in Paul's work specifically near the scrotum). After surgically removing the liquid and inserting a pledget into the wound, compresses were to be applied for the following days, and the operated area was to be washed with warm oil for three days. After the area begins to heal over, it should be washed again before the pledget is removed.[301]

Describing treatment for enterocele (intestinal hernia), Paul noted that some surgeons would bathe their patients after the operation in hot water, and would repeat this for a week, five times per day (also during the night) at regular intervals. This measure, Paul observed, was extremely beneficial, as it prevented inflammation from occurring and speeded up the healing processes. Oil embrocations were used between the baths.[302]

Discussing severe head trauma, in which a fracture makes surgical intervention necessary (with removal of part of the skull), the exposed area should be treated, very gently, with anti-inflammatory and anti-fever measures; bathing in rose oil should be performed frequently. Should inflammation occur despite the treatment, the area should be treated with warm embrocations of rose oil, and be washed in a decoction of marshmallow, fenugreek, linseed, camomile and plants with similar properties. Not only the affected area, but the whole body should be treated thoroughly, with warm baths and anointing.[303] This is one of the rare occasions on which the idea of a 'holistic' therapy is so clearly expressed; the role of bathing in recuperation is reasserted once more in this passage.

Other procedures associated with bath-houses

There are a few procedures which, while they did not involve bathing, were advised to be performed in a bath-house; others involved activities similar to those normally performed in a bath-house, and which could have easily taken place there. Many of these procedures were of a cosmetic nature, or were designed to help with skin conditions.

A treatment aimed at reducing livid spots was to include rubbing them in a bath-house with salts, and applying sponges soaked in a decoction of radish and wormwood.[304] For a number of affections of the face, the patients were

advised to use ointments and mixtures which were to be applied to the face and subsequently washed off.[305]

Headaches specifically accompanying fevers should be treated with anointing; the substances used during the summer may be cold, but should be warm or even hot during the winter, unless the fever was particularly high.[306]

A remark in the course of treatment for jaundice states that while the patient is seated in a bath, drawing vinegar into nostrils and compressing nostrils for a short time will very effectively clear up the sinuses.[307]

Almost all cures prescribed for baldness involved rubbing various mixtures or oils into the scalp, which would have most commonly been done in baths, but one cure specifically was to be used there: rubbing the head with the seed of marshmallow was said to preserve the hair and promote its growth.[308] Alexander advised bathing in warm water, applying copious amounts of water with oil, but avoiding soap or other additives. The bather should enter the bath with the head still damp, and afterwards have oils rubbed into the scalp – rose, grape, apple or myrtle oils were suitable. Further, Alexander advises on the use of laudanum (resin obtained from *Cistus ladanifer* or *Cistus creticus*), mixing it with myrtle oil and wine, and applying it to the scalp; for best results, adiantum (a fern?) was to be added as well.[309]

Regarding dyeing hair, turning it black was to be best done in the following way: after anointing the head with three different mixtures, the hair should be covered with leaves of beet, and when these were secured, washing in the bath-house was advised. Other hair dyes were to be washed off with soap and warm water.[310]

A rather general remark in a Hippocratic text[311] states that the people who do not benefit from bathing ought to be anointed every other day with warm wine and oil, and then wiped dry. This indicated the importance of keeping the patient clean, even if he could not be washed as usual, and the later authors generally followed this principle.

Ear diseases were to be treated with fomentations, flushing and applying rinses into the ear; all of the applications ought to be moderately warm. While baths or bathing were not specifically mentioned in Paul's text here, many such treatments would take place in bath-houses, as the warm and humid environment would be seen as beneficial in most ear diseases and afflictions.[312]

For patients suffering from leprosy or psoriasis, anointing is advised, and the application should be removed with cold water before a new portion is administered.[313] In a somewhat similar vein, patients affected by lichen, or at an earlier stage of psoriasis, should be treated with a desiccative therapy. Among the suggested applications one was, again, to wash away with cold water.[314]

Description of the treatment of the so-called black cicatrices (scars) included a number of possible applications, one of which was required to be scrubbed on the patient's skin in the bath.[315]

Treatments for scorpion stings involved various applications, all of which, Paul states, increased in effectiveness if combined with frequent bathing of the patient, making him sweat and drink wine.[316] This is another case of bathing used primarily as a means of increasing the effectiveness of other cures, rather than as a cure on its own.

For teeth-related inflammations, Paul advised his patients to inhale steam from the seed of henbane (*Hyoscamus niger*) through a small funnel.[317]

In diseases with symptoms similar to those of typhus, anointing with wine or oil (or vapour baths) was advised.[318] These would have been an alternative to bathing, which was discouraged during the earlier stages of the disease.

Conditions in which bathing was discouraged

In certain ailments, bathing was deemed highly undesirable, typically due to the usual physiological effects of bathing being discordant with what was considered best for the patient. It needs to be noted that such ailments were relatively rare; as was already discussed, the general opinion was that the beneficial effects of bathing could outweigh some of its contraindications. In some cases, only a certain type of bathing was considered harmful. Nonetheless, there were a few situations in which abstention from bathing was deemed necessary.

For those whose problems lay in sleeping too much, and too heavily, Paul advised abstention from bathing and from using cooling unguents, as an excess of cold and moist humours was blamed for excessive sleepiness.[319]

Hippocratic *Ancient medicine*[320] mentions that a bath taken at the wrong time (λουτρόν ακαὶρος) might be a cause of illness; one such example is given in *Regimen III.*[321] Beside this example – of a man who started to use hot baths due to a wrong assumption as to the cause of his problems (he suspected general fatigue, while they were due to overeating), a short list of conditions in which bathing might be harmful is listed in the *Regimen in the acute diseases.*[322] A particular example of what the Hippocratic author considered to be a bad use of hot baths is mentioned in the *Epidemics.* One of the "quacks", a certain Herodicus, is said to have killed some of his patients who were suffering from fever by having them run, wrestle and take hot baths.[323] The author felt it necessary to make an additional comment that such unsuitable treatments were harmful.

Treatment of fainting varied significantly, depending on the causes; syncope believed to be arising from crude humours was identified by the following symptoms: the mouth of the patient's stomach was disordered, hypochondrium (upper part of the abdomen caudal) distended with flatulence, the stomach swollen, the complexion either white and watery, or becoming black. Such symptoms were believed to indicate thick humours, and bathing was considered very harmful to patients suffering from them – an observation that was derived from Galen's texts.[324] Alexander was of a similar opinion, arguing that bathing would only intensify fever accompanying

indigestion and fainting. It was only after proper digestion was restored that the patient could be bathed and fed gently warmed-up food.[325]

One was advised to avoid bathing when the bowels are too loose,[326] or too costive (constipation), at least prior to defecation. It should be noted, however, that Paul suggested bathing as a relaxing measure for patients who are to be treated with an enema; in contrast, Hippocratic texts tended to advise laxatives rather than enemas. Alexander noted that the medical advice of the day was to perform purging therapies in the baths.[327] Bathing was also deemed ill-advised when the patient was nauseous, vomiting, or when he had a more serious haemorrhage. Further conditions when bathing should be avoided are mentioned in the Hippocratic *Diseases II*:[328] the patient should not bathe if he suffers from "fluid on the brain"[329] when his "brain suffers from bile" and it causes him pain;[330] when he is vomiting blood or has a haemorrhage from the nose.[331] To this list, later authors added that patients who are spitting blood should avoid frequent bathing, but otherwise followed the old advice closely.[332] Alexander also indicated that certain haemorrhages were provoked by too frequent bathing.[333]

In cases when patients had noticeable shivers caused by a fever, they should avoid cold baths even after the fever had abated.[334] Bathing was also considered best avoided in cases of angina; application of sponges soaked with hot water to the jaws was, however, encouraged.[335] Similarly, bathing should be avoided during various inflammatory kidney affections, at least until the condition loses its intensity.[336]

For afflictions of the mouth, such as staphylitis (inflammation of uvula or tongue), and swellings within the mouth in general, bathing was similarly discouraged.[337] This Hippocratic advice, beside a general notion that the presence of swelling of any kind was a signal to abstain from bathing, was not repeated by Paul, suggesting that it was not deemed important enough on its own to be included in the later works of Roman authors.

Caution was to be taken in the so-called dark diseases, characterised, among other symptoms, by vomiting of dark material or bile, and the sphacelous disease (here, possibly a gastric ulcer): when treating these diseases bathing should be scarce, especially in hot water, and exposure to the sun should be avoided.[338]

Treatment of exanthemata (a rash), or minor ulcerations (which could be a symptom of the plague), called for calefacient applications. Since ulcers were involved, bathing would likely have been avoided; however, bathing was not mentioned here specifically.[339] Exomphalos, a prolapse, or protrusion, of the navel is said by Paul to have a variety of possible causes, and in many cases bathing could have made the affliction worse.[340]

Other cases

In the following section I briefly discuss some of the more interesting cases that do not fit clearly into any of the previous categories. In one of his books,

Paul discusses various types of pain accompanied by fevers.[341] One of the paragraphs specifies that if the pain was caused by thick and viscid humours, then heating measures, both internal and external, should be used. Bathing is not mentioned here specifically, but it is safe to assume that as long as the symptoms indicating that bathing should be avoided were not particularly pronounced, it would be one of the potential measures that could be utilised to help the patient: still, rubbing with oil would likely have been the preferred method here.

Treatment of patients suffering from loss of memory and reason, carus (deep lethargy or coma) and catalepsy (loss of muscle control, slowed-down bodily functions) was based on the perceived causes of the affliction, namely, an exciting intemperament. The cure was based on removing the imbalance (by heating, cooling, moistening or drying the patient). Specific measures are not listed here, but the inclusion of bathing in such therapy seems rather obvious.[342]

For tuberculosis, Hippocratic medicine suggests that bathing is either to be avoided completely[343] or to be very rare and gentle – only warm, not hot, water ought to be used, and the head should not be washed at all;[344] in *Internal affections,* however, part of the treatment of a long-lasting consumption involved washing the patient every morning with a larger amount of hot water, and ensuring that he will remain warm directly afterwards, for the first month of the treatment.[345] This discrepancy could be explained if one were to assume that the passages refer to different stages of the disease.

Inflammations, mostly glandular, referred to as phyma, bubo and phygetlon, were to be treated with cooling measures, but bathing was not mentioned among those. This could possibly be due to the general caution in regard to prescribing bathing when it came to treating inflammations.[346]

Drinking of wine, must or cold water after a bath was to be avoided, as it was considered to be harmful; therefore bathing prior to drinking could be considered untimely.[347] This is discussed by Paul again later, when the detrimental effects of drinking large amounts of cold water or sweet wine after bathing or forceful exercise are said to cause pains and shortness of breath. The treatment involved venesection and clysters.[348]

For removing accidentally swallowed leeches, Paul's advice (aside from swallowing substances like vinegar or brine) is to put the patient in a warm hip-bath and to give him cold water to hold in the mouth, as the leeches were supposed to move towards the cold.[349]

Paul's description of surgically correcting trichiasis (eyelashes growing toward the eye) involved washing off the clotted blood during the operation. While not common, the mention of using the sponge to aid with washing areas requiring extreme caution or delicacy suggests that it might have been the preferred mode of cleaning such areas.[350] An article by E. Voultsiadou discusses the importance of sponges for medicine and hygiene in earlier antiquity, mentioning, among other information, exactly 100 appearances of sponges in Hippocratic texts. Sponges had a wide range of uses, allowing

cleansing, making applications, they were used for curing inflammation of the mouth, as an aid in removing polyps, as a plug while an enema was taking effect (during which time the patient would be sitting in hot water), in wound treatment, for treating fistulae, pain relief, as an aid in treating various gynaecological complaints, and more.[351]

One of the types of castration, applicable to young boys, involved bathing the testicles in hot water and subsequently squeezing them. Paul noted that performing a castration goes against what the physicians should be doing: instead of bringing the patient back to his natural state, castration brings about the opposite. Nonetheless, Paul further stated that physicians are occasionally compelled against their will to operate, and thus he included description of this procedure in his text.[352]

Finally, it might be worth mentioning that overusing hot baths has been linked with impotence[353] – this has not, however, been explicitly stated in the medical sources I examined.

Non-medical authors on medicine

In the following section I examine remarks on medicinal uses of bathing written by authors who were not medical authors or practitioners themselves. I devote some attention to the reasons that moved these authors to discuss matters of medicine and healing; the main purpose of this section, however, is to provide an indication of the extent to which the scientific knowledge of medicine was widespread within wider society (or at least its well-educated elite); this, in turn, should allow conclusions to be drawn about the extent to which the textbook advice was used in practice.

The Roman appreciation for hot springs and their curative properties has a long history;[354] the most famous were the springs near Baiae, in southern Italy; they remained a popular destination at least until the late 5th century. Apart from medical works, which were discussed earlier in the text, numerous authors made references to the curative properties of taking baths, and especially to bathing in hot springs. The nature of these references is quite varied: some of them are genuine advice and show evidence of the author's medical knowledge; others are more of an excuse for a dilettante's attempt at impressing the intended audience with a display of supposed learning and literary style. There can be little doubt that a man who wanted to be considered learned (or thought himself such) would necessarily had to have had at least the most rudimentary knowledge of medicine, in addition to the more commonly expected familiarity with rhetoric, mythology or history. Some of the examples of how this knowledge was communicated are discussed below.

One very clear example can be found in the opening sentence of an epistle written in the early 470s. Sidonius Apollinaris asks his friend if he is staying at Baiae; in that very question, he conveys an image of the place: a sunny resort with hot, sulphurous springs that bring relief to those suffering from lung or liver illnesses.[355] Sidonius fully uses the opportunity to display both his

geographical and medical knowledge (although, based only on this description, their depth might be considered somewhat questionable). The remarks included by Sidonius are both correct and stereotypical, and tell little of the author's genuine medical knowledge – a good possibility exists that he simply relied on someone else's description. Nonetheless, his interest in at least signalling familiarity with contemporary balneology is worth noting.

A significant testimony to the high value attached to springs in Late Antiquity can be found in the writings of Gregory of Nazianzus:

> [. . .] running beneath the earth, and flowing under caverns, are then forced out by a violent blast, and repelled, and then filled with heat by this violence of strife and repulsion, burst out by little and little wherever they get a chance, and hence supply our need of hot baths in many parts of the earth, and in conjunction with the cold [water] give us a healing which is without cost and spontaneous.[356]

Gregory's rhetorical praise of the thermal waters (he writes, for example, how hot and cold water, when used together, provides free and effective healing) is strongly based in the actual application of the natural springs, and baths in general: physicians highly appreciated their beneficial effects and often prescribed their use.[357] Gregory explains the natural heat of water as resulting from unspecified forces to which the water is exposed underground; he does not mention any type of volcanic activity specifically, so it is difficult to ascertain to what extent his comment might reflect actual scientific knowledge. The springs described here are, of course, presented as merely one of many of God's wondrous creations, but being named as such indicates their usefulness and importance for the people. Such compromise, between acknowledging the medicinal value of natural phenomena, but attributing their efficacy to God, is not an uncommon approach from a Christian author, and is in line with the older, pagan religious views that attributed 'wondrous' healing powers to divine intervention; indeed, the concept of the healing properties of the various elements of the natural world being provided by the divine was not uncommon among pagan authors, and can be found in Galen as well. Combining the praise of God with extolling the virtues of natural waters might also suggest that the knowledge of the latter was already very widespread among the addressees of Gregory's oration. Motivated by desire to ensure that due glory was given to God for his creation, the preacher must have been certain of his listeners' appreciation of the benefits of hot springs in the first place. Gregory seems to have possessed at least a rudimentary knowledge of how baths were applied for medical purposes, as at one point he found himself using the thermal waters within the baths of Xanxaris (Xantharis) monastery.[358] He mentioned this in two of his letters, in order to explain why he was unable to make certain requests in person.[359] The treatment of baths was prescribed by medics, and Gregory readily listened to the advice. In Gregory's case, the treatment had to last for a longer time,

as the illness apparently returned after an initial remission. It can be hardly surprising that a patient would be familiar with the treatment prescribed for his complaints; however, the fact that this knowledge is then shared in a letter is telling. On the other hand, the text does not suggest a deeper medical knowledge and the remarks might simply be an amalgamation of the earlier literary models and personal experience. Even so, an appeal for understanding accompanied by an explanation that included medical information allows us to assume that the addressees would have shared at least such a basic knowledge of medicine as well.

Perhaps the most prominent person to seek cure in bathing during the period discussed was Constantine I. Eusebius related that when illness struck Constantine near the end of his life, the Emperor resorted to using hot baths, first at Constantinople itself, and subsequently at Helenopolis in Bithynia.[360] Sozomen included this information as well: Constantine went to Helenopolis to use the mineral spring water there to bathe in an attempt to cure his illness.[361] This, however, was not sufficient, and the Emperor decided to depart for Nicomedia, where he soon died (after receiving the spiritually superior form of bath – baptism). The remark on bathing is brief and general here, and cannot be used to gauge the extent to which either of the authors may have been familiar with medicine; combined with the previous passage, however, and the fact that the stay at hot springs is mentioned at all, it is clear that the remarks about the Emperor's stay at the resort were not accidental.

Bithynia and southern Italy were not the only places famed for their hot springs. Ammianus, who was interested in geography, makes a mention that Palestine was abundant in mineral springs which were used for medical purposes.[362] Similarly, Arabia Felix had "natural hot springs of remarkable curative powers" and an "abundance of brooks and rivers, and a very salubrious climate".[363] Springs were also present in a large number in the Maeotic Gulf area (near the Azov Sea).[364] Other places notable for curative springs included Abarne, a village near Amida, known for the healing properties of the hot waters that were found there.[365] In Amida itself there was a spring of drinkable water, though the hot vapours sometimes made it smell unpleasantly, strongly hinting at the presence of another hot spring, although no mention is made of its use for medicinal purposes. Ammianus' focus shifted to Amida once again when he was describing the city's siege, during which he himself was confined within the walls; the spring was clearly not sufficient for even the normal needs of the city, as an underground channel was constructed to deliver additional water. This channel was used during the siege by a group of Persian soldiers to infiltrate the city, but ultimately, they were not able to accomplish much.[366] When a plague struck the temporarily overpopulated city, it lasted for ten days, until light rain finally put an end to it.[367] Ammianus lists three possible causes of the disease: climate (endemic); pollution of air and water, mainly by corpses (epidemic); or heavy vapours from earth (pestilential). The author states that during the siege there was no way to get rid of the bodies, possibly indicating the cause he thought to be most probable.

After the city fell to the Persians, Ammianus and his few companions, during their flight, encountered more of the hot sulphurous springs; the water was apparently not suitable for drinking; they quenched their thirst only after finding a deep well.[368]

The remarks on hot springs were not the only account from Ammianus related to the natural world: mountains were thought to be beneficial for curing various ailments, as people living there, Ammianus remarked, are known for their health and strength; thanks to the diet, hot baths, good air, and because of the "purer" sunlight, not yet "tainted" by humans.[369] Similarly, in two unrelated passages, Procopius underlined the health benefits of the area near Mt. Vesuvius, in particular: the air there was considered to be very light and especially good for people suffering from consumption,[370] and at the base of the volcano there were numerous springs, with water suitable for drinking.[371]

Comments on the salubriousness of the 'uncivilised' environment were not accidental: elsewhere, Ammianus provided an interesting account of the care of the 4th-century Roman upper class for hygiene, which at the same time includes a strong criticism of the effects of the urban environment on health.[372] As a precaution, when servants of an influential citizen of Rome went to enquire about the health of ill acquaintances, they had to take a bath before they were admitted back into their master's house. The fear of diseases was strong; while modern hygiene has much to say about the practicality of such an arrangement, Ammianus makes a point that the severity of illnesses was greater in the capital than anywhere else, to such an extent that medicine was not able to even ease the suffering of ill people (much less to cure it); Ammianus calls the greater power of illnesses "natural" to the "world's capital". This fear of disease is then contrasted with behaviour motivated by greed: some people, even when severely ill, did not care at all about their health when they had an opportunity to, for example, receive some gold at a wedding, where it would be distributed as a gift to the guests. The criticism included in the sarcastic remark is clear.

While discussing the medical uses of bathing, it is important to remember that many of them relied on the properties of spring water used in the bath – as the passages discussed above show, the ancient authors were well aware of that. Procopius mentioned that mid-way between Dara and Nisibis (located about 16 kilometres apart) there were many springs.[373] The area, however, was a border zone, and the springs were not utilised in any organised manner; the hot spring Procopius mentions in *Buildings*, located in Pythia (Bithynia), on the other hand, is said to have been used for a long time, as it was originally associated with Apollo (it was famed for its healing properties); Justinian built a bath-house that used the thermal waters.[374] This is an interesting example of how the hot springs could be utilised: while the place in which the bath-house was built was already famous for its curative properties, it now had a structure constructed over it, which allowed 'proper' bathing to take place. Furthermore, the bath-house had a steady and, perhaps even more

importantly, free source of excellent hot water. A much earlier example that mentions similar usage of natural springs comes from the *Carus, Carinus and Numerian* section of the *Historia Augusta*. Emperor Carinus (283–285) was said to have enjoyed cold baths, and even had his *frigidarium* further cooled with snow; when he once bathed in a pool that was supplied with water from a rather tepid stream, he complained that the water was good for a woman.[375] While the text describing Carinus' penchant for cold baths is highly unreliable, it is quite clear that the practices described were not considered proper; this is somewhat surprising, as taking the cold baths would signify at least a degree of 'manliness' and endurance (and this is further attested by the cited comment of Carinus). Perhaps this comments and the pride he took from his bathing practices, were considered to be inappropriate by the Romans, as any actions perceived as excessive were. Carinus' behaviour is otherwise portrayed, quite literally, as royally extravagant. The account, apart from showing the imperial son dissatisfied with both naturally warm water and ordinary baths, provides another example of utilising springs in a bath-house environment.

Appealing to the popular knowledge, John Chrysostom, not surprisingly, uses bathing as an example of a "pleasant" measure employed by the doctors to cure their patients. The argument likens the preacher to a doctor, who is praised when he leads the patient to the baths and prescribes other pleasant treatments – but who still remains the good doctor when he needs to cauterise wounds or cause other suffering to the patient, for the patient's own good. Similarly, the preacher sometimes finds himself in need of using altogether unpleasant measures to cure his churchgoers of their spiritual illnesses.[376] Such comparisons appear again, sometimes placing God as the best – and most loving – doctor, but again the baths appear as the inseparable means of curing the patient in a pleasant way.[377] It attests to the common character of using baths in curing various ailments and the churchgoers' familiarity with such practices – without it, the homily's message would hardly have been convincing. As has been previously pointed out, Chrysostom was not particularly original in using medical similes to make a point; already, e.g., Seneca the Younger likened a philosopher to a doctor, in that they both provide advice on how to live a better life. With the advent of Christianity, the happier life became the godlier life, but the figure of the doctor in the simile remained unchanged.

The imagery of the bath and the doctor appears in another homily, this time aiding in restoring strength to a withered hand; Chrysostom finds himself forced to explain why he cannot desist from forceful attempts to lead his flock in the right direction, even if that is not to their liking. If he was a doctor, he writes, and they his patients, they would be asking him to finish the therapy, and if he stopped curing them, they would accuse him of leaving them prematurely. The withered hand, treated with bathing until it fully regains its dexterity, is an example of what any therapy – physical or spiritual – should look like.[378] The real-life situation presented to the listeners

indicates Chrysostom's – at least minimal – knowledge of medical uses of the baths, as washing and massaging a weakened limb was a typical treatment. The passage further indicates their place in social consciousness as an element of the medical craft. O. Temkin remarked that, in general, Christian views on the matter of suffering were that it could bring the sufferer closer to God. The immortal soul mattered most, not the temporary suffering. He continues that Christianity had both positive views on the body (secular Christians) and negative (ascetics). He also mentions that the *Apostolic constitutions*[379] likened the bishop to a doctor – likely an inspiration for Chrysostom's own rhetoric, and one drawing from earlier sources as well.[380] Chrysostom was also aware of the inefficacy of bathing where putrefaction and sores were involved – likening prayers of one whose soul was impure to attempts of washing a body suffering from such illness, stating that in both cases the effort was in vain.[381]

Moving on briefly to the West, one can find a rather personal remark on a curative use of bathing in Augustine's (354–430) *Confessions*, describing the author's state of mind following the burial of his mother: "It then occurred to me that it would be a good thing to go and bathe, for I had heard that the word for, bath, *balneum*, took its name from the Greek *balaneion* (βαλανείον), because it washes anxiety from the mind."[382] Augustine continues to say that bathing did not ease his mind, as the worries coming from the heart were not possible to simply sweat out. This almost accidental reference to bathing shows that Augustine must have been familiar with at least some of the basic ideas behind contemporary medicine. This does not necessarily imply its deeper understanding, however, as the presented knowledge is fairly generic, and the phrasing of the account itself indicates its superficiality. The entire passage appears quite in line with the traditional consolatory texts. It bears all the hallmarks of a *consolatio*, in this case addressed primarily to the author himself, but written also with the thought of potential readers. Here, Augustine is not merely expressing his distress caused by bereavement, or pitying himself; he mentions that his mother, Monica, died well, and that he prayed a lot then. He attempted to assuage his grief by bathing after Monica's burial and noted its inefficacy. Eventually, Augustine found consolation in religious texts and contemplating his mother's pious life; the presence of God in Augustine's life had a considerable and positive effect on his ability to cope with the loss.[383] Taken together, Augustine's account may be read as a demonstration of the great value of prayer and piety compared to the more mundane and material methods of seeking peace of mind. That is not to say that in Augustine's opinion bathing as a means of dealing with grief was to be rejected altogether; it was simply inadequate in his circumstances, and inferior to faith and inner peace that faith can bring.

Only a few years after Augustine finished writing his *Confessions*, Chrysostom, in one of his last texts (a letter written to Olympias, his close friend, during his exile), listed the hardships that had befallen him during the long journey: trying to console his addressee, he assures her that he is

in fine health, even given the difficult climate and circumstances. One of the hardships he had to bear was the lack of bathing. He described how the daily deprivations have, in fact, improved his health; having been unable to use the luxury of bathing for a long time, Chrysostom assures Olympias that he no longer feels the need for the relief that it offers. The lack of bathing is then listed together with insufficient supply of food, unskilful doctors and being held in one room, without possibility to move freely, as one of the hardships Chrysostom was no longer finding intolerable.[384] The letter makes it clear that the bishop himself enjoyed bathing prior to his exile – for its beneficial effect on health, if nothing else. It would be hardly surprising if Chrysostom's assurances were nothing more than that – remarks aimed at convincing Olympias of his well-being; or, equally possible, attempts by the preacher to convince himself of the advantages of living in such poor conditions, perhaps along the lines of what is known in psychology as the 'sweet lemon' coping tactic. That the conditions in which Chrysostom was staying were indeed not favourable might be convincingly argued from the fact of his demise only a few months later. Nonetheless, examining together the latter two accounts reveals a shared conviction of the therapeutic efficacy of bathing: only dramatic circumstances have caused the authors to reconsider their views. Augustine noted that bathing was simply insufficient to alleviate his emotional distress; Chrysostom tried to convince Olympias (and perhaps himself) that he was better off without bathing. One can only assume that the majority of Romans living at that time would have had neither the reason nor the need to re-evaluate their own opinions on the curative properties of bathing.

The *Life of St. Anthony*,[385] traditionally ascribed to Athanasius of Alexandria, in discussing the daily life of Anthony of Egypt, mentioned that one of the ascetic practices in which the saint engaged was refraining from oiling his body. Sozomen repeats the information and expands on it in his *Church history*,[386] adding to the list abstaining from bathing and other, undefined more closely, ways in which the body might be loosened with moisture. The passages provide an interesting example of reasoning behind the refusal to engage in oiling (and bathing): apart from modesty (which was also mentioned), the relief from stress and tension was seen as undesirable from the ascetics' perspective, as not only was the bathing seen as luxurious, but it also made attaining mastery over one's body more difficult. The ascetic's goal was, as far as the state of the body was concerned, exactly the opposite to the one sought by physicians who prescribed bathing; the reasoning behind abstaining from bathing implies at the very least a good understanding of the physiological effects of oiling the body and bathing – although whether such understanding was Anthony's, or his biographers' own, might be debated. I find it far more likely that the explanation provided by the authors writing about Anthony was along the lines of what their intended audience would have expected to hear, and tailored their tale accordingly.

Regarding construction of a bath-house that may have been intended for medicinal uses, Malalas mentioned that Emperor Domitian (81–96) built

a bath called Medeia in Antioch; it was named after the statue that the Emperor placed inside it. The building was located by the mountain, near the *monomacheion* (on the acropolis), near the temple of Aphrodite. A temple of Asclepius was constructed in the same place, indicating that the bath-house may have been extensively used by the ill people seeking treatment at the temple.[387] Unfortunately, the chronicler did not provide more direct evidence for such activity.

Only the bath-house is specifically named by Chrysostom, as one of the many places where the rich can obtain what they desire, mainly food, with ease. At the same time, however, the bishop observed that such abundance of food only leads to more diseases, and that the poor are generally enjoying better health.[388] This trope is very similar to the one presented by Ammianus, and found support in the longevity, often reported in hagiographies and *Lives*, of the ascetics, who renounced worldly pleasures and excesses. Nonetheless, bathing itself was very rarely rejected purely on the grounds of physical health.

In a rare example mentioning an actual medical procedure, Procopius related that, during the Vandal wars, Gelimer (who reigned in 530–534) found himself besieged in 533 on Mt. Papua (Pappua) by the Byzantine commander Pharas. The Vandal king made a request, asking for a loaf of bread, a cithara and a sponge.[389] The unusual message piqued the curiosity of the besieging force's commander: regarding the sponge, the messenger explained that Gelimer's eyes had become swollen, and that he needed the sponge to properly wash them. The request was granted. The fragment indicates the importance of the suitable bathing accessories for proper treatment; a sponge was apparently deemed necessary for washing the eyes even in such dramatic circumstances.

Finally, some medical procedures were also recorded in the 7th-century *Miracles of St. Artemios*; in addition to the examples discussed in the previous chapter, two more cases can be examined. The third miracle describes a certain man from Amastris who was spending his time in the church, hoping for a cure – the saint cut the boil the man had on his testicles with a scalpel; the author noted that this was followed by a great stench, and that the carers who were present washed the effluvium off, with warm water and sponges.[390] The description, sadly, lacks details of the circumstances in which this happened (e.g., how the saint appeared in the church, or how was he recognised as such). Another miracle which, again, resembles a standard medical procedure more than anything else, tells of a man who was suffering from ulcers on the tip of his penis; as the man was sleeping, he saw in a dream the saint, who applied a smooth cloth soaked in vinegar with salt to the affected organ. The man was cured after two days; the "miraculous" cure later proved to be effective on other patients as well.[391] It is not difficult to notice that Artemios' appearance in the dream does not differ much from the divine visitations of Asclepius described by earlier pagan authors.[392] The apparent expectation that even supernatural healing would come about in a manner resembling

or mimicking a medical procedure can be seen from much earlier examples, stretching back to the pagan Asklepieia.[393] This, then, is another example of adopting certain literary models for Christian discourse and practice (the sick spending the night in the saint's church exactly mirroring the divinatory or even directly healing incubation previously commonly encountered in pagan healing sanctuaries).

Conclusions

For ancient physicians, bathing was usually treated as part of a regimen the patient should adopt to get back to health. In some cases it was used as one of the key elements of a regimen (or was itself the key), in others it only supported the therapy. The general attitude to bathing was positive; in cases when there were no clear signs that the patient should not bathe, or when possible benefits (which included soothing of pain in the sides, chest and back, concocting and bringing up sputum, easing respiration, removing fatigue, softening the joints and the skin, relieving heaviness of the head and moistening of the nostrils) from bathing would be greater than possible harm, the patient should bathe. In cases when bathing could be harmful, particularly in fevers, the patient could still be kept clean by being anointed with warm oil with wine and then being wiped dry. Apart from case-specific symptoms and the general state of the patient, also the frequency of bathing and the way in which the patient prefers to bathe should be taken into consideration when the physician is to decide about changes in the bathing regimen.

It would be tempting to find in the medical writings a broader concept of cleanliness, one that would link bodily purity to the patient's health in general, in a similar way to that in which hygiene is understood in the modern day. The continuous presence of bathing – and also the 'internal' cleaning with the help of purges and emetics – appear to support such conclusions; numerous remarks on physical effects of the means used, their general practicality and lack of 'mystical' thinking associated with the vast majority of medical procedures described in the relevant sources make such ideas rather plausible. While bathing was important, the 'purity' it provided did not, apparently, stretch beyond the tangible effects – medical authors, generally speaking, did not tend to concern themselves with mystical concepts or divine aid (which, in turn, often makes the more rationally and scientifically minded doctors a target of ridicule and mockery on the part of religious authors – in particular the authors of the various lives of saints associated with healing). They would still occasionally suggest the use of amulets or 'magical' procedures, although the extent to which this was done due to belief in the genuine efficacy of these measures, and to what extent it was a result of the patient's expectations, is difficult to determine. In addition, it is interesting to notice how the concept of cleanliness applies to the whole body, not only its surface. While bathing contributed to keeping the patient clean on the outside, from a medical point of view in most cases its importance came from

supplementing internal purging of the body, usually by loosening it, and allowing the medicine to work better, in addition to overall relaxing and heating or cooling effects. Keeping the patient clean was, very clearly, considered important for a number of reasons; there were suggestions on how to achieve this without resorting to actually bathing the patient in situations where bathing was deemed detrimental to the patient's health. Despite that, it may be argued that cleanness itself, while highly desirable, was only of secondary importance, when compared to the various other effects bathing had on the patient's body. Indeed, the original ideas on a healthy, 'hygienic' life (with the term 'hygiene' encompassing a much wider scope of concepts than the word possesses in the common, modern-day usage) had relatively little to do with bodily cleanliness, and denoted primarily the way of conducting oneself in such a manner as to achieve the balance between the various humours; these basic guidelines changed relatively little over time (regardless of whether humoral theory was being discussed or not), and while bathing appears in all of the texts dealing with the matter, there is little to indicate that they were important specifically because of their cleaning effects.

The educated elite were familiar with medical procedures and basics of leading a healthy life, including the knowledge of how to properly bathe to obtain the greatest health benefits from the activity. The depth of this knowledge, however, is difficult to determine. The casual nature of the references and remarks regarding bathing could easily be an indication of common, everyday knowledge, occasionally expanded by the author's own illness and professional medical advice. The advent of Christianity brought with it changes in attitudes; however, despite the greater focus on the spiritual life and lower importance placed on the needs of the body, medical uses of bathing remained highly prominent; it could be argued that by the end of the period discussed in this book, with the somewhat diminished scale of communal bathing, the medicinal use of bathing gained further prominence.

Notes

1 K.-H. Leven, "'At times these ancient facts seem to lie before me like a patient on a hospital bed' – retrospective diagnosis and ancient medical history", pp. 375–378, 383–384, in: H. F. J. Horstmanshoff, M Stol (eds.), *Magic and rationality in ancient Near Eastern and Graeco-Roman medicine*, Leiden, Boston, MA 2004, pp. 369–386.
2 J. Scarborough, *Roman medicine*, London, Southampton 1969, p. 24.
3 V. Nutton, *Ancient medicine*, London 2004, pp. 157–158, 171.
4 J. Scarborough, *Roman medicine*, pp. 45, 51.
5 V. Nutton, *Ancient medicine*, p. 302.
6 V. Nutton, *Ancient medicine*, pp. 165, 294.
7 V. Nutton, "From Galen to Alexander. Aspects of medicine and medical practice in Late Antiquity", *Dumbarton Oaks Papers*, vol. 38, 1984, p. 12.
8 J. Duffy, "Byzantine Medicine in the sixth and seventh centuries: aspects of teaching and practice", *Dumbarton Oaks Papers*, vol. 38, 1984, pp. 21–22.

9 J. Scarborough, A.-M. Talbot, "Paul of Aegina", in: A. P. Kazhdan (ed.), *The Oxford dictionary of Byzantium*, Oxford 1991.
10 P. E. Pormann, "Paulos of Aigina", in: P. T Keyser, G. L. Irby-Massie, *The encyclopaedia of ancient natural scientists*, London 2008, p. 629.
11 J. Scarborough, "Galen", in: *The Oxford dictionary* . . ., Oxford 1991, p. 816.
12 Philostratus, *Lives of the sophists*. Eunapius, *Lives of the philosophers and sophists*, transl. W. C. Wright, Cambridge, MA 1921.
13 J. Scarborough, "Oribasios", in: *The Oxford dictionary* . . ., p. 1533.
14 T. E. Gregory, J. Scarborough, "Aetios of Amida", in: *The Oxford dictionary* . . ., p. 30.
15 J. Duffy, "Byzantine medicine . . .", pp. 25–26.
16 J. Scarborough et al., "Alexander of Tralles", in: *The Oxford dictionary* . . ., p. 58.
17 T. S. Miller, *The birth of the hospital in the Byzantine Empire*, Baltimore, London 1997, p. 169.
18 V. Langhof, "Structure and genesis of some Hippocratic treatises", p. 220, in: *Magic and rationality* . . ., pp. 219–275.
19 V. Langhof, "Structure and genesis . . .", p. 257.
20 J. Stannard, "Aspects of Byzantine materia medica", *Dumbarton Oaks Papers*, vol. 38, 1984, pp. 205–211, pp. 205–206.
21 T. C. Allbutt, "Byzantine medicine – Finlayson memorial lecture", p. 413, in: T. C. Allbutt, *Greek medicine in Rome. The Fitzpatrick lectures on the history of medicine delivered at the Royal College of Physicians of London in 1909–1910, with other historical essays*, London 1921, pp. 389–424.
22 P. E. Pormann, "Paulos of Aigina", in: *The encyclopaedia*, p. 629.
23 V. Nutton, "From Galen to Alexander . . .", pp. 1–2.
24 V. Nutton, "From Galen to Alexander . . .", p. 4.
25 V. Nutton, "Byzantine medicine, genres, and the ravages of time", in: B. Zipser (ed.), *Medical books in the Byzantine world*, Bologna 2013, pp. 7–18, p. 9.
26 A. Cruse, *Roman medicine*, Stroud 2004, p. 26.
27 A. Cruse, *Roman medicine*, p. 139; D. Montserrat, "'Carrying on the work of the earlier firm': doctors, medicine and Christianity in the *Thaumata* of Sophronius of Jerusalem", p. 230, in: H. King (ed.), *Health in antiquity*, Abingdon 2005, pp. 230–242; V. Nutton, *Ancient medicine*, p. 305.
28 R. Ginouvès, *Balaneutike. Recherches sur le bain dans l'antiquité grecque*, Paris 1962, pp. 231–427.
29 A. T Crislip, *From monastery* . . ., pp. 121–123.
30 A T. Crislip, *From monastery* . . ., pp. 21–28.
31 Focusing predominantly on the Roman period, I have decided to use the Roman spelling of the deity's name.
32 V. Nutton, *Ancient medicine*, p. 303.
33 P. Barefoot, "Buildings for health: then and now", pp. 207–212, in: *Health in antiquity*, pp. 205–215; V. Nutton, *Ancient medicine*, p. 160.
34 A. Cruse, *Roman medicine*, p. 29.
35 A. Cruse, *Roman medicine*, p. 152.
36 G. Clark, "The health of the spiritual athlete", p. 228, in: *Health in antiquity*, pp. 216–229.
37 V. Nutton, *Ancient medicine*, p. 306.
38 D. Montserrat, "Carrying on the work . . .", p. 233; V. Nutton, *Ancient medicine*, p. 306.
39 Sophronius of Jerusalem, *Laudatio SS. Cyri et Joannis, martyrum*, P. Bringel (ed.), *Panégyrique des saints Cyr et Jean, Patrologia Orientalis* 51.1 No 226, Turnhout 2008; V. Nutton, *Ancient medicine,* p. 305.
40 V. Nutton, "From Galen to Alexander . . .", p. 6.

41 D. Montserrat, "Carrying on the work . . .", p. 235.
42 *The miracles of St. Artemios* . . ., mm. 3 and 20, to mention only two.
43 Hippocrates, *Diaeta IV*, transl. W. H. S. Jones, in: *Hippocrates*, vol. 4, LCL, ed. E. H. Warmington, London, Cambridge, MA 1967 (later: *Diaeta IV*); P. J. van der Eijk, "Divination, prognosis and prophylaxis: the Hippocratic work 'On Dreams' (*De Victu* 4) and its Near Eastern background", p. 195, in: *Magic and rationality* . . ., pp. 187–218.
44 Hippocrates, *Diaeta IV*, 89.
45 Hippocrates, *Diaeta IV*, 90.
46 Hippocrates, *Diaeta IV*, 93.
47 Artemidorus, *The interpretation of dreams*.
48 P. J. van der Eijk, "Divination, prognosis and prophylaxis . . .", pp. 188–189; 202–203.
49 H. F. J. Horstmanshoff, "Asclepius and temple medicine in Aelius Aristides' *Sacred tales*", p. 339, in: *Magic and rationality* . . ., pp. 325–341.
50 H. F. J. Horstmanshoff, "Asclepius and temple . . .", p. 330.
51 H. E. Sigerist, A *history of medicine*, vol. 2, Oxford 1987, p. 67.
52 I. Israelowich, *Patients* . . ., pp. 64–66.
53 A. T. Crislip, *From monastery* . . ., pp. 121–122.
54 S. C. Fox, "Health in Hellenistic and Roman times: the case studies of Paphos, Cyprus and Corinth, Greece", p. 60, in: *Health in antiquity*, pp. 59–82.
55 N. Morley, "The salubriousness of the Roman city", pp. 192–193, 198, in: *Health in antiquity*, pp. 192–204.
56 I Israelowich, *Patients* . . ., p. 121.
57 I. Israelowich, *Patients* . . ., p. 124.
58 I. Israelowich, *Patients* . . ., pp. 52–55.
59 J. Scarborough, *Roman medicine*, p. 77.
60 V. Nutton, "From Galen to Alexander . . .", p. 9.
61 A. T Crislip, *From monastery* . . ., p. 132.
62 A. T. Crislip, *From monastery* . . ., pp. 30, 84, 91.
63 T. S. Miller, "Byzantine hospitals", *Dumbarton Oaks Papers*, vol. 38, 1984, pp. 53–54.
64 Hippocrates, *De aere, aquis et locis*, transl. W. H. S. Jones, in: *Hippocrates*, vol. 1, LCL, ed. T. E. Page, E. Capps, W. H. D. Rouse, L. A. Post, E. H. Warmington, London, Cambridge, MA 1948 (later: *Aer.*).
65 Hippocrates, *De arte*, 5, transl. W. H. S. Jones, in: *Hippocrates*, vol. 2, LCL, ed. T. E. Page, E. Capps, W. H. D. Rouse, L. A. Post, E. H. Warmington, London, Cambridge, MA 1923.
66 Hippocrates, *Aer.*, 3.
67 Hippocrates, *Aer.*, 4.
68 Hippocrates, *Aer.*, 5.
69 Hippocrates, *Aer.*, 6.
70 Hippocrates, *Aer.*, 7.
71 Hippocrates, *Aer.*, 8.
72 Hippocrates, *Aer.*, 9.
73 Aetius of Amida, *Libri medicinales* (later: *Libri*), 1, 165.
74 Oribasius, *Collectiones medicae*, 10 (later: *Med. coll.*); *Euporistes*, 1, 14 (ch. 24).
75 Paul of Aegina, *Epitome de medicine libri vii* (later: *Epitome*), 1, 50, in: Adams F., *The seven books of Paulus Aegineta: translated from the Greek: with a commentary embracing a complete view of the knowledge possessed by the Greeks, Romans, and Arabians on all subjects connected with medicine and surgery*, London 1844–1847.
76 Paul of Aegina, *Epitome*, 1, 52.
77 Oribasius, *Synopsis ad Eustathium filium* (later: *Synopsis*), 1, 29; *Med. coll.* 10, 3ff.

78 Aetius of Amida, *Libri*, 3, 167.
79 Hippocrates, *Diaeta I*, transl. W. H. S. Jones, in: *Hippocrates*, vol. 4.
80 Hippocrates, *Diaeta I*, 3.
81 Hippocrates, *Diaeta I*, 25.
82 Hippocrates, *Diaeta II*, 57, transl. W. H. S. Jones, in: *Hippocrates*, vol. 4.
83 Hippocrates, *De liquidorum usu*, 1, transl. P. Potter, in: *Hippocrates*, vol. 8, LCL, ed. G. P. Goold, London, Cambridge, MA 1995 (later: *Liqu.*).
84 Hippocrates, *Liqu.*, 1.
85 Hippocrates, *Liqu.*, 1.
86 Hippocrates, *De morbis* (later: *Morb.*), transl. P. Potter, in: *Hippocrates*, vol. 5, LCL, ed. G. P. Goold, London, Cambridge, MA 1988.
87 Hippocrates, *Morb.*, 65.
88 Hippocrates, *Morb.*, 65.
89 Hippocrates, *De diaeta salubri* (later: *Salubr.*), 1, transl. W. H. S. Jones, in: *Hippocrates*, vol. 4; *Diaeta III*, 68, transl. W. H. S. Jones, in: *Hippocrates*, vol. 4.
90 Paul of Aegina, *Epitome* 1, 53; Oribasius, *Euporistes*, 1, 10.
91 Hippocrates, *Salubr.*, 3.
92 Hippocrates, *Diaeta III*, 68.
93 Paul of Aegina, *Epitome*, 1, 51.
94 Hippocrates, *Salubr.*, 5.
95 Oribasius, *Med. coll.*, 8, 21.
96 Paul of Aegina, *Epitome*, 1, 42.
97 Paul of Aegina, *Epitome*, 1, 54; Oribasius, *Synopsis*, 5, 29.
98 Alexander of Tralles, *The twelve books of medicine*, in: *Alexander von Tralles*, ed. and transl. T. Puschmann, Vienna 1878–1879 (later: *Medici . . .*), 1, 3.
99 Paul of Aegina, *Epitome*, 1, 55; Oribasius, *Synopsis*, 5, 31.
100 Fine, hand-picked sea salt.
101 Oribasius, *Synopsis*, 5, 40.
102 Aetius of Amida, *Libri*, 4, 32.
103 Paul of Aegina, *Epitome*, 1, 57.
104 Galen, *De sanitate tuenda libri vi* (later: *San. Tu.*), 6,8 in: K. Koch (ed.), CMG, vol. 4, 2, Leipzig, Berlin 1923.
105 Paul of Aegina, *Epitome*, 1, 58; Oribasius, *Synopsis*, 5, 41; Aetius of Amida, *Libri*, 4, 58.
106 Paul of Aegina, *Epitome*, 1, 59; Oribasius, *Synopsis*, 5, 42; Aetius of Amida, *Libri*, 4, 34.
107 Paul of Aegina, *Epitome*, 1, 70, Galen, *San. Tu.*, 6; Oribasius, *Synopsis*, 6, 51; Aetius of Amida, *Libri*, 4, 9.
108 Paul of Aegina, *Epitome*, 1, 71; Galen, *San. Tu.*, 6.
109 Paul of Aegina, *Epitome*, 1, 72; Galen, *San. Tu.*, 6.
110 Oribasius, *Synopsis*, 5, 33.
111 Paul of Aegina, *Epitome*, 1, 33.
112 Paul of Aegina, *Epitome*, 1, 95.
113 Hippocrates, *Diaeta II*; Galen, *San. Tu.*, 5, 5; Oribasius, *Med. coll.*, 5; *Euporistes*, 1, 12; Aetius of Amida, *Libri*, 1.
114 Paul of Aegina, *Epitome*, 1, 38.
115 Oribasius, *Med. coll.*, 4, 38; Galen, *San. Tu.*, 3, 11; Aetius of Amida, *Libri*, 3, 18.
116 Galen, *San. Tu.*, 4, 14; Paul of Aegina, *Epitome*, 1, 38.
117 Paul of Aegina, *Epitome*, 1, 51.
118 Oribasius, *Med. coll.*, 10, 6.
119 Aetius of Amida, *Libri*, 3, 169.
120 Galen, *San. Tu.*, 6.
121 Paul of Aegina, *Epitome*, 1, 20

122 Oribasius, *Synopsis*, 5, 15.
123 Aetius of Amida, *Libri*, 4, 55.
124 Galen, *San. Tu.*, 3, 7.
125 Galen, *San. Tu.*, 3, 10.
126 Oribasius, *Synopsis*, 5, 16.
127 Paul of Aegina, *Epitome*, 1, 21.
128 Paul of Aegina, *Epitome*, 1, 31; Oribasius, *Synopsis*, 5, 27.
129 Hippocrates, *Diaeta II*, 66.
130 Paul of Aegina, *Epitome*, 1, 98. Consequently, the treatment for sleepiness involved cutting down on any humidifying measures.
131 Oribasius, *Med. coll.*, 6.
132 Paul of Aegina, *Epitome*, 3, 4. F. Adams notes that Paul abridged Galen's *De compositione medicamentorum secundum locos libri x.*, 2, and that similar material is covered by Oribasius, *De locis affectis* (later: *De loc. aff.*), 4, 1 and Aetius of Amida, *Libri*, 6, 40, F. Adams, *The seven books . . .*, vol. 1, p. 353.
133 Alexander of Tralles, *Medici libri duodecim* (later: *Medici*), 1, 10.
134 Alexander of Tralles, *Medici . . .*, 1, 12.
135 Paul of Aegina, *Epitome*, 3, 14; Aetius of Amida, *Libri*, 6, 8; Oribasius, *Synops*is, 8, 17.
136 Alexander of Tralles, *Medici . . .*, 1, 17.
137 Paul of Aegina, *Epitome*, 3, 17; Oribasius, *Synopsis*, 8, 9.
138 Hippocrates, *Morb.*, 67.
139 Hippocrates, *Morb.*, *II*, 54.
140 Hippocrates, *De affectionibus interioribus* (*Internal affections* – later: *Int.*), 3, transl. P. Potter, in: *Hippocrates*, vol. 6, LCL, ed. G. P. Goold, London, Cambridge, MA 1988.
141 Hippocrates, *Int.*, 4.
142 Hippocrates, *Int.*, 7; *Morb. II*, 58, *Morb. III*, 7.
143 Hippocrates, *Int.*, 9; *Morb. II*, 57.
144 Hippocrates, *Morb. II*, 59.
145 Hippocrates, *Morb. II*, 56.
146 Hippocrates, *Morb. II*, 61.
147 Hippocrates, *Morb. II*, 60.
148 Hippocrates, *Morb. II*, 47.
149 Hippocrates, *Morb. II*, 55.
150 Hippocrates, *Morb.*, 68.
151 Hippocrates, *De affectionibus* (later: *Aff.*), transl. P. Potter, in: *Hippocrates*, vol. 5, 53.
152 Hippocrates, *Aff.*, 15.
153 Hippocrates, *Aff.*, 21; *Int.*, 44–46; *Morb. III*, 14.
154 Paul of Aegina, *Epitome*, 3, 74; Aetius of Amida, *Libri*, 5; Oribasius, *Synopsis*, 9, 45.
155 Hippocrates, *Morb. II*, 70.
156 Paul of Aegina, *Epitome*, 3, 16; Aetius of Amida, *Libri*, 6, 11; Oribasius, *Synopsis*, 8, 10.
157 Paul of Aegina, *Epitome*, 5, 35.
158 Paul of Aegina, *Epitome*, 5, 42.
159 Paul of Aegina, *Epitome*, 6, 114.
160 Paul of Aegina, *Epitome*, 6, 117.
161 Paul of Aegina, *Epitome*, 1, 23.
162 Galen, *San. Tu.*, 5.
163 Oribasius, *Synopsis*, 5, 18.
164 Aetius of Amida, *Libri*, 4, 30.

165 Paul of Aegina, *Epitome*, 1, 26; Oribasius, *Synopsis*, 5, 22.
166 Paul of Aegina, *Epitome*, 2, 46.
167 Paul of Aegina, *Epitome*, 2, 46; cf. commentary in *The seven books . . .*, vol. 1, p. 306, mentioning Aetius of Amida, *Libri*, 5, 130. Other works listed here include: Celsus, *De medicina octo libri* (Later: *De medicina*), 3, 11–12; Galen, *De differentiis febrium libri ii*, 2; *De symptomatum causis*, 2, 5; *De tremore, palpatione, convulsione et rigore*.
168 Paul of Aegina, *Epitome*, 3, 5. Chiefly based on Galen's *De compositione medicamentorum secundum locus libri x* (later: *De med. sec. loc.*), 3.
169 Paul of Aegina, *Epitome*, 3, 22; Francis Adams (F. Adams, *The seven books . . .*, vol. 1, p. 436) traces this back to Oribasius, *Synopsis*, 8, 50, and notes similarity with Aetius' advice to be found in *Libri*, 8. Galen discusses eye diseases in *De loc. aff.*, 4 and *De med. sec. loc.*, 4.
170 Alexander of Tralles, *Medici . . .*, 2.
171 Paul of Aegina, *Epitome*, 3, 18; Galen, *De loc. aff.*, 3, 11; Aetius of Amida, *Libri*, 6, 26; Oribasius, *Synops*is, 8, 14.
172 Hippocrates, *Aphorismi*, esp. 6, 51, in: *Hippocrates*, vol. 4.
173 Paul of Aegina, *Epitome*, 3, 41.
174 Paul of Aegina, *Epitome*, 3, 45.
175 Paul of Aegina, *Epitome*, 3, 45. F. Adams notes (F. Adams, *The seven books . . .*, vol.1, p. 555) that this section was copied by Paul from Aetius of Amida, *Libri*, 11, 27.
176 Alexander of Tralles, *Medici . . .*, 11, 1.
177 Hippocrates, *Int.*, 24.
178 Hippocrates, *Int.*, 14–17.
179 Alexander of Tralles, *Medici . . .*, 11, 2.
180 Paul of Aegina, *Epitome*, 3, 44. F. Adams tracks Paul's sources to be Aetius and Oribasius, who relied on Galen's advice; *The seven books . . .*, vol. 1, p. 540.
181 Hippocrates, *Aff.*, 21; *Int.*, 44–46; *Morb. III*, 14.
182 Alexander of Tralles, *Medici . . .*, 8, 2.
183 Paul of Aegina, *Epitome*, 3, 47. Adams identifies Paul's source to be Aetius, who used Archigenes; their treatment included purges, exercise and baths; *The seven books . . .*, vol. 1, p. 569.
184 Paul of Aegina, *Epitome*, 3, 48.
185 Hippocrates, *Morb II*, 55.
186 Paul of Aegina, *Epitome*, 3, 50; Galen: *De med. sec. loc.*, 9; Aetius of Amida, *Libri*, 10, 18.
187 *The seven books . . .*, vol. 1, pp. 583–585.
188 Hippocrates, *Places in man* (*Locis in homine* – later: *Loc.*), 40, in: *Hippocrates*, vol. 8.
189 Hippocrates, *Int.*, 36–38.
190 Paul of Aegina, *Epitome*, 4, 1. Aetius of Amida, *Libri*, 12, 120 gives similar treatment.
191 Paul of Aegina, *Epitome*, 4, 4; Aetius of Amida, *Libri*, 14, 20.
192 Paul of Aegina, *Epitome*, 5, 50. A recent article discusses the chemical properties of the herb: G. Appendino, F. Pollastro, L. Verotta, M. Ballero, A. Romano, P. Wyrembek, K. Szczuraszek, J. W. Mozrzymas and O. Taglialatela-Scafati, "Polyacetylenes from Sardinian Oenanthe fistulosa: a molecular clue to risus sardonicus", *Journal of Natural Products*, vol. 72, no. 5, 2009, pp. 962–965.
193 Galen, *San. Tu.*, 4.
194 Oribasius, *Synopsis*, 5, 21.
195 Aetius of Amida, *Libri*, 4, 41.
196 Paul of Aegina, *Epitome*, 1, 22.

197 Alexander of Tralles, *Medici* . . ., 1, 1.
198 Paul of Aegina, *Epitome*, 2, 16.
199 Paul of Aegina, *Epitome*, 2, 17.
200 Paul of Aegina, *Epitome*, 2, 18.
201 Paul of Aegina, *Epitome*, 2, 20.
202 Alexander of Tralles, *Medici* . . ., 1, 5.
203 Paul of Aegina, *Epitome*, 2, 21; Aetius of Amida, *Libri*, 5, 81; Oribasius, *Synopsis*, 6, 11.
204 Paul of Aegina, *Epitome*, 2, 22–27.
205 Alexander of Tralles, *Medici* . . ., 1, 6.
206 Paul of Aegina, *Epitome*, 2, 34.
207 F. Adams, *The seven books* . . ., vol. 2, p. 257.
208 Alexander of Tralles, *Medici* . . ., 1, 6.
209 Alexander of Tralles, *Medici* . . ., 1, 4.
210 Paul of Aegina, *Epitome*, 2, 29–30; Aetius of Amida, *Libri*, 5, 28.
211 Paul of Aegina, *Epitome*, 2, 31; Oribasius, *Synopsis*, 6, 20; Aetius of Amida, *Libri*, 5, 88.
212 Paul of Aegina, *Epitome*, 2, 32; Paul of Aegina follows Oribasius, *Synopsis*, 6, 21 and Galen, *De diff. febr.*, 1, 11. Similar remarks are to be found in Aetius of Amida, *Libri*, 5, 92.
213 Paul of Aegina, *Epitome* 2, 33; Oribasius, *Synopsis*, 6, 22, in turn taken from Galen, *De methodo medendi libri X* (later: *Meth. med.*).
214 Alexander of Tralles, *Medici* . . ., 1, 3.
215 Paul of Aegina, *Epitome*, 2, 60; Galen, *Ad glauconem de medendi method libri ii*, 1; Aetius of Amida, *Libri*, 5, 101ff. In addition, Aetius characterises syncope as a form of fainting that can also take place in sleep, and that is always accompanied by sweating.
216 Paul of Aegina, *Epitome*, 3, 28; Galen, *De med. sec. loc.*, 7.
217 Paul of Aegina, *Epitome*, 3, 9; Galen, *Meth. med.*, 13, Oribasius, *Synopsis*, 8, 1; Aetius of Amida, *Libri*, 6, 3.
218 Hippocrates, *Morb. II*, 65.
219 Paul of Aegina, *Epitome*, 3, 39; *De med. sec. loc.*, 8; Aetius of Amida, *Libri*, 9, 12.
220 Alexander of Tralles, *Medici* . . ., 8, 1.
221 Paul of Aegina, *Epitome*, 3, 27; Galen, *Meth. med. sec. loc*, 6; *De loc. aff.*, 4; Aetius of Amida, *Libri*, 8, 4.
222 Hippocrates, *Aphorismi*, 2, 43.
223 Paul of Aegina, *Epitome*, 3, 78.
224 Galen, *Ad Glauconem*, 2.
225 Alexander of Tralles, *Medici* . . ., 12.
226 Paul of Aegina, *Epitome*, 4, 54.
227 Paul of Aegina, *Epitome*, 5, 30.
228 Paul of Aegina, *Epitome*, 2, 58.
229 Paul of Aegina, *Epitome*, 3, 13.
230 Alexander of Tralles, *Medici* . . ., 1, 15.
231 Hippocrates, *De morbo sacro*, 2, in: *Hippocrates*, vol. 2.
232 Paul of Aegina, *Epitome*, 3, 18.
233 Paul of Aegina, *Epitome*, 3, 33; Galen, *De. med. sec. loc.*, 7 (et. al.); Aetius of Amida, *Libri*, 8, 76; Oribasius, *Synopsis*, 9, 7–8.
234 Hippocrates, *Aff.*, 39.
235 Alexander of Tralles, *Medici* . . ., 1, 2.
236 Hippocrates, *Morb.*, 2, 67.
237 Paul of Aegina, *Epitome*, 6, 73.
238 Paul of Aegina, *Epitome*, 6, 82.

239 Aetius of Amida, *Libri*, 14, 84.
240 Paul of Aegina, *Epitome*, 6, 110.
241 Paul of Aegina, *Epitome*, 3, 28; Galen, *De med. sec. loc.*, 7.
242 Paul of Aegina, *Epitome*, 3, 53; taken mostly from Aetius, *Libri*, 14, 22.
243 Oribasius, *Synopsis*, 5, 36.
244 Paul of Aegina, *Epitome*, 1, 39.
245 Alexander of Tralles, *Medici* . . ., 3, 1.
246 Hippocrates, *Aff.*, 2.
247 Hippocrates, *Aff.*, 4.
248 Hippocrates, *Aff.*, 16.
249 Hippocrates, *Morb II*, 21; *Morb II.*, 25.
250 Hippocrates, *Morb II*, 13.
251 Paul of Aegina, *Epitome*, 4, 39.
252 Hippocrates, *Morb II*, 14.
253 Paul of Aegina, *Epitome*, 4, 59. Other authors discussed dracunculiasis as well, e.g. Galen, *De loc. aff.*, 4. 23; Aetius of Amida, *Libri*, 14, 85.
254 It is worth noting that dracunculiasis appears to be near to eradication, with no new cases reported, for the first time since record keeping started, in January 2013. "Monthly report on dracunculiasis cases, January 2013 – first month with zero cases", *Weekly Epidemiological Report* (WHO), 15 March 2013, year 88, vol. 11, p. 128. Since 2015, worldwide recorded cases have been well under fifty a year.
255 Paul of Aegina, *Epitome*, 5, 3.
256 Paul of Aegina, *Epitome*, 5, 6; similar treatment is given by Aetius of Amida, *Libri*, 13, 16.
257 Paul of Aegina, *Epitome*, 5, 54.
258 Hippocrates, *Epidemics* (later: *Epid.*), 7, 101, transl. W. D. Smith, in: *Hippocrates*, vol. 7, LCL, ed. G. P. Goold, London, Cambridge, MA 1994.
259 Paul of Aegina, *Epitome*, 6, 9.
260 Paul of Aegina, *Epitome*, 6, 15; Aetius of Amida, *Libri*, 7, 66.
261 Paul of Aegina, *Epitome*, 6, 21; similarly in Aetius of Amida, *Libri*, 7, 53.
262 Hippocrates, *De fracturis*, 8, transl. E. T. Whittington, in: *Hippocrates*, vol. 3, LCL, London, Cambridge, MA 1959.
263 Paul of Aegina, *Epitome*, 6, 99.
264 Oribasius, *Synopsis*, 5, 25.
265 Paul of Aegina, *Epitome*, 1, 27.
266 Paul of Aegina, *Epitome*, 2, 42.
267 Paul of Aegina, *Epitome*, 2, 47.
268 Paul of Aegina, *Epitome*, 3, 6; Galen, *Meth. med.*, 13; *De loc. aff.*, 5, 4; Aetius of Amida, *Libri*, 6, 2. F. Adams notes that Alexander of Tralles favoured tepid baths for treating phrenitis (F. Adams, *The seven books* . . ., vol. 1, p. 363).
269 Hippocrates, *Aff.*, 10.
270 Alexander of Tralles, *Medici* . . ., 1, 13.
271 Paul of Aegina, *Epitome*, 3, 19; F. Adams' commentary also points to: Galen, *De loc. aff.*, 3, *Meth. med.*, 12; Aetius of Amida, *Libri*, 6, 38; Oribasius, *Synopsis*, 8, 16.
272 Paul of Aegina, *Epitome*, 3, 20.
273 Hippocrates, *Epid.*, 5, 75. Presumably, the infection occurred when the man sustained the original injury.
274 Hippocrates, *Epid.*, 7, 36.
275 Paul of Aegina, *Epitome*, 3, 42; similarly Aetius of Amida, *Libri*, 9, 43; Oribasius, *Synopsis*, 9, 14; *De loc. affect.*, 4, 88.
276 Hippocrates, *Epid.*, 7, 3.

277 Paul of Aegina, *Epitome*, 3, 43; Galen, *De med. sec. loc.*, 9; *De loc. aff.*, 6, 2; Aetius of Amida, *Libri*, 9, 29.
278 Paul of Aegina, *Epitome*, 3, 54. Adams also refers to Galen, *De med. sec. loc.*, 9; *De loc. aff.*, 6, 6; and Aetius of Amida, *Libri*, 11, 32.
279 Paul of Aegina, *Epitome*, 3, 55.
280 Paul of Aegina, *Epitome*, 3, 59. Information taken from Galen's *De med. sec. loc.*, 9 and from Aetius of Amida, *Libri*, 14.
281 Paul of Aegina, *Epitome*, 3, 60–73.
282 Paul of Aegina, *Epitome*, 3, 79; F. Adams links this passage to Aetius of Amida, *Libri*, 14, 76 and Celsus, *De medicina*, 5, 28, who also recommends bathing the affected area in hot water in which rapes or vervain were previously boiled.
283 Paul of Aegina, *Epitome*, 3, 81.
284 Hippocrates, *De ulceribus*, transl. P. Potter, in: *Hippocrates*, vol. 8, 27.
285 Paul of Aegina, *Epitome*, 4, 21; Galen, *Meth. med.*, 14; *Ad Glauconem*, 2.
286 Paul of Aegina, *Epitome*, 4, 29; Aetius of Amida, *Libri*, 14, 71; Oribasius, *Synopsis*, 7, 14.
287 Paul of Aegina, *Epitome*, 4, 44.
288 Paul of Aegina, *Epitome*, 4, 51; Oribasius, *Synopsis*, *7*, 19.
289 Paul of Aegina, *Epitome*, 4, 55.
290 Paul of Aegina, *Epitome,* 5, 9.
291 Paul of Aegina, *Epitome*, 5, 11.
292 Paul of Aegina, *Epitome*, 5, 15.
293 Paul of Aegina, *Epitome*, 5, 12.
294 Paul of Aegina, *Epitome*, 5, 20; *The seven books* . . ., vol. 2, p. 191.
295 Paul of Aegina, *Epitome*, 6, 6. This operation is also mentioned by Aetius of Amida, *Libri*, 7, 92, but is much briefer than in Paul's work.
296 Paul of Aegina, *Epitome*, 6, 29.
297 Paul of Aegina, *Epitome*, 6, 34.
298 Alexander of Tralles, *Medici* . . ., 5, 6.
299 Paul of Aegina, *Epitome*, 6, 56.
300 Paul of Aegina, *Epitome*, 6, 60. F. Adams comments (*The seven books* . . ., vol. 2, p. 359) that Paul's description of the procedure and the following treatment was more detailed than those of Aetius and others
301 Paul of Aegina, *Epitome*, 6, 62. F. Adams's commentary mentions that both Celsus and Aetius (*Libri*, 14, 22) provided description of the therapy, although that of Aetius was more general. Aetius proposed using astringent and desiccative applications rather than surgery.
302 Paul of Aegina, *Epitome*, 6, 65. Aetius considered this operation to be very dangerous; *Libri*, 14, 23.
303 Paul of Aegina, *Epitome*, 6, 90. F. Adams points out that on multiple occasions, Hippocratic texts forbade liquid applications, especially including wine, in cases of head wounds. *The seven books* . . ., vol. 2, p. 434.
304 Paul of Aegina, *Epitome*, 1, 27; Oribasius, *Synopsis*, 5, 24.
305 Paul of Aegina, *Epitome*, 3, 25; F. Adams comments that this section was taken mostly from Oribasius, *De loc. affect.*, 4, who likely used Galen's *De med. sec. loc.*, 5.
306 Paul of Aegina, *Epitome*, 2, 44.
307 Paul of Aegina, *Epitome*, 3, 50.
308 Paul of Aegina, *Epitome*, 3, 1; cures for baldness were also discussed by Galen, *De med. sec. loc.*, 1; *Meth. med.*, 14, 18.; Aetius of Amida, *Libri*, 6, 65; and Oribasius, *Synopsis*, *8*, 22; Galen, *Meth. med.*, 4, 5.
309 Alexander of Tralles, *Medici* . . ., 1, 2.
310 Paul of Aegina, *Epitome*, 3, 2; also see: Aetius of Amida, *Libri*, 6, 58.

311 Hippocrates, *Aff.*, 42.
312 Paul of Aegina, *Epitome*, 3, 23; Galen, *De med. sec. loc.*, 3; Aetius of Amida, *Libri*, 6, 74ff.
313 Paul of Aegina, *Epitome*, 4, 2; Galen, *Meth. med.*, 14; *De causis differentiis*, 3, 6; Aetius of Amida, *Libri*, 13, 134.
314 Paul of Aegina, *Epitome*, 4, 3.
315 Paul of Aegina, *Epitome*, 4, 47.
316 Paul of Aegina, *Epitome*, 5, 7.
317 Paul of Aegina, *Epitome*, 3, 26.
318 Hippocrates, *Int.*, 40, 41.
319 Paul of Aegina, *Epitome*, 1, 99.
320 Hippocrates, *De prisca medicina*, 21, in: *Hippocrates*, vol. 1.
321 Hippocrates, *Diaeta III*, 57.
322 Hippocrates, *De diaeta in morbis acutis*, 67, in: *Hippocrates*, vol. 2.
323 Hippocrates, *Epid.*, 6, 3, 18.
324 Paul of Aegina, *Epitome*, 2, 37; Oribasius, *Synopsis*, 6, 27; Aetius of Amida, *Libri*, 5, 97; the advice most likely taken from Galen's *Meth. med.*, 12, 5 and *Ad Glauconem*, 1.
325 Alexander of Tralles, *Medici* . . ., 1, 3.
326 Compare with Paul's advice conditionally allowing bathing for patients with loose bowels, but only after the crisis took place (Paul of Aegina, *Epitome*, 2, 58).
327 Alexander of Tralles, *Medici* . . ., 1, 2.
328 Hippocrates, *Morb.*, 2, 2.
329 Hippocrates, *Morb. II*, 15.
330 Hippocrates, *Morb. II*, 19.
331 Hippocrates, *Morb. II*, 20.
332 Paul of Aegina, *Epitome*, 3, 31; Galen, *Meth. med.*, 5; *De med. sec. loc.*, 6 and 7; Aetius of Amida, *Libri*, 8, 65; Orbasius, *Synopsis*, 9, 2.
333 Alexander of Tralles, *Medici* . . ., 5, 5.
334 Paul of Aegina, *Epitome*, 3, 21; Galen, *De tremore, palp. et rigore.*
335 Hippocrates, *Morb. II*, 26–27.
336 Paul of Aegina, *Epitome*, 3, 35.
337 Hippocrates, *Morb. II*, 29, 31.
338 Hippocrates, *Morb. II*, 73–75.
339 Paul of Aegina, *Epitome*, 4, 8.
340 Paul of Aegina, *Epitome*, 6, 51.
341 Paul of Aegina, *Epitome*, 2, 40. Much of the content here is taken from Galen's *Meth. med.*, 12, 8 and *De loc. aff.*, 2.
342 Paul of Aegina, *Epitome*, 3, 11; Galen, on curing memory loss: *De loc. aff.*, 3, 5.
343 Hippocrates, *Morb. II*, 48.
344 Hippocrates, *Morb. II*, 50.
345 Hippocrates, *Int.*, 12.
346 Paul of Aegina, *Epitome*, 4, 22; most likely after Galen, *Ad Glauconem.*
347 Paul of Aegina, *Epitome*, 5, 29.
348 Paul of Aegina, *Epitome*, 5, 65.
349 Paul of Aegina, *Epitome*, 5, 36.
350 Paul of Aegina, *Epitome*, 6, 8. F. Adams's commentary points, *i.a.*, to the Hippocratic *De victu acutorum*, 66 and to Aetius of Amida, *Libri*, 7, 71–72, which is very similar to Paul's.
351 E. Voultsiadou, "Sponges: an historical survey of their knowledge in Greek antiquity", *Journal of the Marine Biological Association of the United Kingdom*, vol. 87, 2007, pp. 1757–1763 (here: pp. 1758, 1761).
352 Paul of Aegina, *Epitome*, 6, 68.

353 B. Ward-Perkins, *The fall* . . ., p. 33.
354 R. Jackson, "Waters and spas in the classical world", *Medical History*, supplement no. 10, 1990, pp. 1–13.
355 Sidonius Apollinaris, *Poems and letters*, book 5, l4, 1.
356 Gregory of Nazianzus, *Orationes*, 28, 26., transl. C. G. Browne, J. E. Swallow, in: P. Schaff, H. Wace (eds.), NPNF, vol. 7; Gregory of Nazianzus, *De theologia* (orat. 28), 26, in: J. Barbel (ed.), *Die fünf theologischen Reden*, Düsseldorf 1963.
357 E.g. Oribasius, *Synopsis*, 1, 29; *Med. coll.*, 10, 3; Aetius of Amida, *Libri*, 3, 167; Paul of Aegina, *Epitome,* 1, 52.
358 The mention of a place of this or a similar name does not seem to appear anywhere else; I have not been able to pinpoint it with any degree of certainty, aside from locating it someplace in Cappadocia. Perhaps it is known better under another name, but if this is the case, then I have not been able to make the connection.
359 Gregory of Nazianzus, *Epistulae*, 125, 126.
360 Eusebius Pamphilus, *Life of Constantine*, 4, 61, NPNF vol. 1.
361 Sozomen, *Historia ecclesiastica*, 2, 34.
362 Ammianus Marcellinus, *Res gestae*, 14, 8, 12.
363 Ammianus Marcellinus, *Res gestae*, 23, 6, 36.
364 Ammianus Marcellinus, *Res gestae*, 22, 8, 30.
365 Ammianus Marcellinus, *Res gestae*, 18, 9, 2.
366 Ammianus Marcellinus, *Res gestae*, 19, 5, 4–5.
367 Ammianus Marcellinus, *Res gestae*, 19, 4.
368 Ammianus Marcellinus, *Res gestae*, 19, 8, 7.
369 Ammianus Marcellinus, *Res gestae*, 27, 4, 14.
370 Procopius, *History*, 4, 4, 30.
371 Procopius, *History*, 8, 35, 7.
372 Ammianus Marcellinus, *Res gestae*, 14, 6, 23ff.
373 Procopius, *History*, 2, 18, 2.
374 Procopius, *Buildings*, 5, 3. In an earlier period, this place of healing was associated with Apollo; Christians linked it with the Archangel Michael – which shows how important the spring was; it was not only used for medical purposes, but also had a religious importance.
375 *Carus, Carinus and Numerian*, 17 in: *Historia Augusta*, transl. D. Magie, LCL, London 1922
376 John Chrysostom, *De diabolo tentatore (homiliae 1–3)*, 1, 5, MPG 49.
377 John Chrysostom, *In paralyticum demissum per tectum*, 2, MPG 51.
378 John Chrysostom, *In Matthaeum (homiliae 1–90)*, 88, MPG 57.
379 *Apostolic constitutions*, 2, 3, 20, vol. 7. The relevant passage is also quoting Matt. 9:12 and Luke 19:10.
380 O. Temkin, *Hippocrates* . . ., p. 138.
381 John Chrysostom, *In epistulam ii ad Timotheum (homiliae 1–10)*, 6, MPG 62.
382 Augustine, *Confessions*, 9, 12, 32, in: A. C. Outler (transl. and ed.), *Confessions and Enchiridion*, Philadelphia 1955.
383 The cited passage is discussed by J. Lössl in "Augustine's *Confessions* as a *consolation of philosophy*", pp. 63–64, in: J. A. van den Berg, A. Kotzé, T. Niclas, M. Scopello (eds.), *"In search of truth": Augustine, Manichaeism and other Gnosticism. Studies for Johannes van Oort at sixty*, Leiden, Boston, MA 2011, pp. 47–74. The same text also discusses the way in which God is called a "doctor", the best source of spiritual healing (p. 67).
384 John Chrysostom, *Epistulae ad Olympiadem (epist. 1–17)*, 2, 4.
385 Athanasius, *Life of St. Anthony*, 7, in: P. Schaff, H. Wace (eds.), NPNF, vol. 4.
386 Sozomen, *Historia ecclesiastica*, 1, 13.

387 John Malalas, *Chronographia*, 10, 50.
388 John Chrysostom, *In epistulam ii ad Corinthios (homiliae 1–30)*, 12, 5.
389 Procopius, *History*, 5, 6, 31. Gelimer's other requests were related to the fact that ever since he had withdrawn to the mountain, he had not been able to eat proper bread, and to his desire to compose a poem about the woeful situation in which he found himself.
390 *The miracles of St. Artemios* . . ., m. 3.
391 *The miracles of St. Artemios* . . ., m. 20.
392 E.g. Aelius Aristides, *Orationes*, *Ἱεροὶ λόγοι*, ed. Dindorf W., *Aristides*, vol. 1. Leipzig 1829, repr. Hildesheim 1964, 47.57, later in 48.20–21. This example is particularly relevant, as the text describes how Asclepius advises Aelius in a dream to bathe in a river. Following that, Aelius recovered.
393 I. Israelowich, *Patients* . . ., p. 58.

4 Final conclusions

During the time period which I have been examining, the Roman Empire underwent major changes and transformations, up to and including its partial collapse. These changes greatly affected the lives of the Empire's inhabitants; in some cases, they were effected by the new social, religious and intellectual developments. Ultimately, the whole process could be described as a complex arrangement of overlapping feedback loops between the various parts of the state's government and army, its social and religious groups (the dividing line between them often blurry at best), its economic processes and the external influences, pressures and threats from the neighbouring tribes and states. On a local community level, these processes would often have been perceptible only to a limited extent. In my research I have examined how such vicissitudes influenced the development of bathing habits among the Roman populace and, to a lesser extent, of bathing arrangements.

Bathing arrangements were dictated, first and foremost, by the available bathing facilities or lack thereof (in some cases, evidence of improvisation is present). At the beginning of the period discussed, the grand *thermae* were still being built, renovated and maintained; by its end, few of them remained, many fell into disuse or underwent considerable transformation. Gymnasia, still present within some of the bathing establishments in the 4th century, quickly disappeared during the 4th century as well. Smaller and less luxurious bath-houses gradually replaced many of the larger establishments. Despite these changes, bathing remained a public and social activity, even with the increasing popularity of individual bath-tubs.

The factors that determined changes in bathing facilities, bathing culture and customs were numerous. Economic ones included the availability of sufficient water for bathing, especially for maintaining the flow of water in pools. As aqueducts, often built for the express purpose of providing baths with sufficiently clean, plentiful water, fell into disrepair, bathing establishments that relied on them had to adapt to the more limited supply of water from wells or cisterns. Perhaps an even more important factor was the cost of fuel necessary to heat up not only a sufficient amount of water, but also the baths themselves; limiting both the size of bath-houses and the amount of hot water necessary for bathing could go a long way to create savings.

One of the other factors that determined one's bathing habits and experiences was individual wealth – for the rich, a personal retinue served both to attend their master's or mistress's needs as well as protection; the bather's own, often valuable, bathing implements also served to indicate his wealth and status. Together with suitably expensive clothes and jewellery worn on the way to the bath-house, such displays of wealth could have made the bathers' status clear even when they were nude, and the retinue's presence could effectively prevent any unwanted socialising from occurring. There is little evidence to indicate the extent to which personal modesty might have limited such displays of status; existing evidence indicates that the company of one's trusted servants in a bath-house, at least, was common.

There were few laws regulating bathing specifically; relevant secular laws mentioning bathing focused chiefly on preserving social norms and values, but the implemented measures do not exceed in their scope or severity regulations pertaining to other aspects of day-to-day life. Similarly, Church laws of this period mentioning bathing were designed to curb excesses, but were neither more damning nor more severe than canons aimed at improving morality in other areas of life.

Regarding the question of whether men and women kept bathing together throughout Late Antiquity, the most likely answer would be yes; the few scant remarks addressing the issue, not least in the legal texts, appear to confirm that this trend continued, at least to a certain extent. Local customs and arrangements likely varied, as did the degree of nudity of bathers.

From the perspective of literary sources, little can be said about the day-to-day running of bath-houses. It is clear that at least some of the establishments had full-time caretakers who managed them – and that such caretakers could live on the premises of the bathing complex. Baths would normally be open from early morning until evening, but bathing at night, if it happened, was rare; both the rhythm of daily life in Late Antiquity and the high cost of keeping a bath-house lit and running after dark would have made night-time bathing unusual and expensive; the fact that some of the bath-houses served as shelters for the homeless during the night further suggests night-time bathing would have been rare at best. The extent to which employing slaves as bathing attendants may have continued throughout Late Antiquity is difficult, even impossible, to trace, due to scarcity of available evidence.

It is clear that bath-houses were seen as a means of gaining prestige as well as profits. Naming a bath-house after its sponsor was common, among both private and imperial benefactors. A trend of increasing reliance on imperial patronage can be easily traced throughout Late Antiquity, particularly when it comes to large-scale endeavours, such as restoration of a city's public buildings after disasters; bath-houses commonly feature on the lists of rebuilt structures. Indeed, bath-houses seemed to be kept in working order whenever possible – some became less luxurious than before, but keeping these establishments open appears to have remained a priority task for the locals. Over time, a number of factors contributed to the change in bathing

arrangements even in the major cities. Whether the causes were financial, cultural or a mixture of both, the classic *thermae* with their spacious, communal swimming pools (kept relatively clean by the constant flow of water, now often no longer sustainable due to decaying water infrastructure) were replaced by smaller establishments with individual, bucket-filled bath-tubs where the bathers could now also, as a side effect, enjoy a greater degree of privacy than before. This can, however, be also viewed as a shift in the nature of the communality of bathing towards a less convivial atmosphere – in so far as the number of individuals who could share it at the same time diminished.

Bath-houses occasionally served functions different to those for which they were built; designed to be a social space, baths could serve as adequate meeting places, shelters for the homeless at night or temporary quarters for soldiers. They also offered room for conducting official business; presumably, also for dealing with private matters.

Accidents, death and violence, whilst rare, did occasionally happen in bath-houses. Bodyguards, in the form of one's retinue, offered some protection; Romans were well aware of the vulnerability accompanying bathing. Nonetheless, an accidental slip or a determined assailant could both prove equally deadly. Kidnapping or capture was also a risk for those who had sufficiently powerful enemies, and bath-houses on more than one occasion proved to be suitable places for arranging an ambush.

Regarding the impact of Christianity on bathing customs, it can be argued that it was limited, and at the very least gradual; Christian moralists in many cases adopted the arguments of Stoics, and warned against the dangers of bathing, but did not oppose the practice itself. Those few who did oppose bathing were themselves outside of the main body of the Christian community – ascetics and some of the monks, rejecting life in society as a whole; while often admired, their example was not widely followed. An 'average' Christian was exhorted to avoid living in luxury and pleasure, fame and wealth were not to be sought, but any riches that were available were to be spent on good works. As a consequence, bathing was recommended only for those who needed its medicinal or hygienic benefits; bathing for pleasure was to be avoided. Nonetheless, evidence suggests that the majority of Christians kept enjoying bathing to a far greater extent than the preachers would deem acceptable.

On the other hand, the impact of bathing on the developing Christian discourse was considerable. Church authors writing about baptism often found themselves using language associated with bathing – explaining the mystery of baptism by using familiar words and expressions, and drawing outright parallels with everyday washing. In such comparisons, unsurprisingly, baptism was invariably presented as far superior to mundane ablutions – nonetheless, for the great majority of Christians bathing remained a common activity even after they received their baptism. Bathing was seen as beneficial to health, and eventually came to be incorporated into charitable Christian

activities: those too poor or too ill to bathe on their own could, at least in the larger cities, count on the assistance of others.

Bathing appears on several occasions in martyrdom narratives, serving either as a backcloth to the story, or as a device in its telling. In a society in which bathing played an important role, its associations with health and well-being were open to subversion: when martyrdom was presented as the greatest good, anything that could prevent it was designated as undesirable and wrong, with a warm bath-house becoming the place of death.

Miraculous healing, a recurring topic in pagan literature dealing with the supernatural, remained a common theme in Christian narratives as well; Christian authors, however, sought to replace the traditional healing deities with acceptable alternatives – saints and angels. Sites of sacred springs and healing sanctuaries were gradually Christianised, and what was deemed miraculous healing continued, although under a different brand.

The Jewish population of the Empire made use of Roman bath-houses; bathing was necessary for ritual ablutions. While the Roman baths were occasionally viewed with suspicion (due to the presence of statues and risks of a moral nature), they were still deemed suitable for both everyday and ritual use.

In the context of secular medical practice, bathing occupied a major role in the everyday regime for the healthy – at least for those concerned with the matters of health who had ready access to baths. Properties of various types of water were known to those engaged in medical profession, and to – at least – part of the educated elite. Bathing and washing were among the most common elements of treatments; most often used to complement a therapy, though occasionally on their own, depending on the patient's general condition and ailments. Authors of medical treatises prescribed a great variety of bathing procedures, tailored to the needs of the patient. Such attention to detail and minute distinctions are indicative of a great deal of practical experience of the practitioners and authors of medical treatises. Aspects of bathing such as the type of water used, type of bathing itself, its frequency, length, temperature of water, time of day during which the bathing should be performed, whether the bath should take place before or after a meal and the substances to be used in the water were all distinguished. Much attention to details of washing and bathing procedures is evident even from the medical compendia that often abridged their source material, further indicating the perceived importance of bathing in medicine.

The great majority of ailments were believed to be eased or cured with baths, and the cases in which bathing could have been harmful were carefully noted. In general, bathing was deemed beneficial to the patient's health even when not specifically part of the therapy, and it can be safely assumed that the patients would continue with their usual bathing habits unless specifically told to adjust them (or to stop bathing altogether) by their physician. The relaxing and 'loosening' effect of bathing was very well understood and utilised in aiding pharmacotherapy, in particular when the administered drugs,

such as powerful purgatives or diuretics, could cause major disruption in the functioning of the patient's body. Bathing could both increase the effectiveness of certain drugs and reduce their unwanted side effects.

One should also not forget about the most obvious effect of bathing, that is, cleanliness of the patient. Patients' feeling of well-being benefited from subjecting the body to familiar routines, and there is little need to add that caring for a clean and well-kept patient must have been preferable to physicians to the opposite. While hygiene, in the modern popular understanding of the word, did not feature prominently in the texts (though it was mentioned occasionally), most of its underlying principles were in place during Late Antiquity, encompassed by the contemporary concept of hygiene as healthy living in general. A patient following advice taken from the medical works of the time would nearly always remain as clean as usual, if not more so. Furthermore, some of the procedures described in medical treatises had more to do with cosmetic than medicinal practices, strongly suggesting that performing many such services was expected of physicians. The texts often advise performing them in a bath-house.

Numerous non-medical authors made references to medicinal uses of bathing in their texts. These included both incidental remarks and passages focusing specifically on health and medicine. It is clear from them that the appreciation of the curative value of hot springs was widespread, as was the deep-seated conviction of the health benefits offered by bathing. Occasional remarks on the favourable impact of the lack of bathing (or inefficacy of bathing) create an impression that such observations were perceived even by their own authors as something unusual or unexpected. Comments or appeals to the addressee, or the intended audience, made by the authors indicate an expectation of at least a superficial understanding of medicinal uses of bathing on the part of the reader.

The development of, and changes in, bathing during Late Antiquity are relatively well documented in primary sources despite few deliberate attempts at dealing with the subject. This period, both in the Roman East and West, was one of transformation and change, in many cases results of which led to a decline in the standard of living. Despite this, the wealth of evidence, incidental remarks and anecdotal evidence relevant to bathing is such that it can only be explained by the continued popularity of this activity. Much effort and resources were put into ensuring that this traditional part of daily life was preserved as much as was practical. In this, perhaps, one can find parallels with the contemporary scientific culture: abridged and compiled treatises found new life in encyclopaedias; bath-houses, though often smaller and less luxurious, remained. Of all the secular customs of Roman society in Late Antiquity, it was perhaps bathing, deeply rooted in tradition and everyday practice, that the Romans held on to the most.

Appendix: More notable bath-houses referred to in the work

Name	*Founder*	*Location*	*Date built*	*Major renovation*	*Other information*
Achilles (of)	unknown	Constantinople		432–433 AD	pre-Constantinian
Agrippa (of)	Marcus Vipsanius Agrippa	Rome	25 BC	After fire of 80 AD	the first grand *thermae*. Out of use by 7th century
Alexander (of)		Constantinople, hospice of Euboulos	Early 4th century (?)		Burned down during riots of 532
Anastasian	Constantine	Constantinople	Early 4th century	Valens' reign (?)	Served as military quarters in 365
Antoninus (of)	Antoninus Pius	Carthage	mid-2nd century AD	389 AD	
Caracalla (of)	Caracalla	Rome	212–216 AD		Operational until 6th century
Carosian	Valens	Constantinople	375 AD		
Constantinianae	Constantine	Rome	Before 315 AD	ca. 440 AD	Damaged during Sack of Rome in 410 AD
Constantianae/ Constantinianae	Constantine/ Constantius	Constantinople	Constructed along with the Church of the Holy Apostles		
Dagistheos (in the quarter of)	Anastasius/ Justinian	Constantinople	Early 5th century		
Dara (at)	Anastasius	Dara	Early 6th century		
Diocletianum	Diocletian	Antioch	Late 3rd century		

(*Continued*)

Name	*Founder*	*Location*	*Date built*	*Major renovation*	*Other information*
Etruscus (of)	Claudius Etruscus	Rome	Second half of 1st century AD		
Gadara (at)		Crete			
Gargilius (of)		Carthage			
Healing	Public works	Alexandria	ca. 466 AD		
Health	Public works	Alexandria	ca. 466 AD		
Helenianai (at)		Constantinople			
Hunting Baths		Leptis Magna			Discussed in scholarship because of its decorations
Ikaros		Tripolis in Phoenicia M.		Mid-5th century	Known for statue collection
Livianum	Septimius Severus	Antioch	Early 3rd century		Built on imperial order from unused funds for bath fuel
Medeia	Domitian	Antioch	late 1st century		Named for the famous statue
Scholasticia (of)	Scholasticia (renovator)	Ephesus	1st century AD	4th century	
Severus (of)	Septimius Severus	Antioch Alexandria	Late 2nd century		
Silvanus (of)		Campania, Italy			
Zeuxippus (of)	Septimius Severus/ Constantine (major reconstruction)	Constantinople	Late 1st/early 2nd century; 11th May 330 (rededication)	After 532 AD	Statue collection in late antiquity, connected to the imperial palace

Bibliography

Primary sources

Aelius Aristides, *Orationes*, *Ἱεροὶ λόγοι*, ed. Dindorf W., *Aristides*, vol. 1. Leipzig 1829, repr. Hildesheim 1964.

Aetius of Amida, *Iatricorum libri XVI*, A. Olivieri, *Aëtii Amideni libri medicinales i–iv*, CMG 8.1, Leipzig 1935.

Alexander of Tralles, *The twelve books of medicine*, in: *Alexander von Tralles*, ed. and transl. T. Puschmann, Vienna 1878–1979.

Ammianus Marcellinus, *Roman history*, transl. Rolfe J. C., Cambridge, MA 1982–1986.

Apostolic constitutions, ANF, vol. 7.

Artemidorus, *The interpretation of dreams*, transl. and com. White R. J., Park Ridge, NJ 1975.

Athanasius, *Life of St. Anthony*, NPNF, vol. 4.

Augustine, *Confessions*, in: Outler A. C. (transl. and ed.), *Confessions and Enchiridion*, Philadelphia 1955.

Basil of Caesarea, *In quadraginta martyres Sebastenses*, MPG 31, 508–525.

Celsus, *De medicina*, transl. Spencer, W. G., vol. 1–3, London, Cambridge, MA 1935–1938.

Chronicon Paschale 284–628 AD, transl. Whitby M. and Whitby M., Liverpool 1989.

Clement of Alexandria, *Christ the educator*, ed. Wood S. P., New York 1954.

Clement of Alexandria, *Instructor*, ANF, vol. 2.

Codex Iustinianus – Frier Bruce W. (ed.), *The Codex of Justinian. A new annotated translation, with parallel Latin and Greek text*, Cambridge 2016.

Codex Theodosianus – Clyde P. (ed.), *The Theodosian Code and Novels and the Sirmondian Constitutions: a translation with commentary, glossary and bibliography*, New York 1969.

Corpus Iuris Civilis, ed. and transl. S. P. Scott, *The civil law*, Cincinnati 1932.

Epiphanius of Salamis, *Panarion*, in: Holl K. (ed.), *Epiphanius, Bände 1–3: Ancoratus und Panarion*, *Die griechischen christlichen Schriftsteller* 25, 31, 37, Leipzig, 1:1915; 2:1922; 3:1933.

Eunapius of Sardis, *Lives of the philosophers and sophists*, in: Philostratus, *Lives of the sophists*. Eunapius, *Lives of the philosophers and sophists*, transl. Wright W. C., Cambridge, MA 1921.

Eusebius Pamphilus, *Life of Constantine,* NPNF, vol. 1.

Frontinus, *On the water supply of the city of Rome*, in: Evans H. B., *Water distribution in ancient Rome. The evidence of Frontinus*, Ann Arbor, MI 1997.

Galen, *Ad glauconem de medendi methodo libri ii*, in: Kühn, C. G., *Claudii Galeni opera omnia*, vol. 11, Leipzig 1826, 1–146.
Galen, *De compositione medicamentorum secundum locus libri x*, in: Kühn C. G., *Claudii Galeni opera omnia*, vols. 12–13, Leipzig 12:1826; 13:1827, repr. Hildesheim 1965, 12, 378–1007; 13, 1–361.
Galen, *De crisibus libri iii*, in: Alexanderson B., *Galenos. Peri kriseon. Studia Graeca et Latina Gothoburgensia* 23. Göteborg 1967, 69–212.
Galen, *De differentiis febrium libri ii*, in: Kühn C. G. (ed.), *Claudii Galeni opera omnia*, vol. 7. Leipzig 1824, repr. Hildesheim 1965, 273–405.
Galen, *De locis affectis libri vi*, in: Kühn C. G. (ed.), *Claudii Galeni opera omnia*, vol. 8, Leipzig 1824, repr. Hildesheim 1965, 1–452.
Galen, *De methodo medendi libri xiv*, in: Kühn C. G. (ed.), *Claudii Galeni opera omnia*, vol. 10, Leipzig 1825, repr. Hildesheim 1965, 1–1021.
Galen, *De sanitate tuenda libri vi,* in: Koch K. (ed.), CMG, vol. 4, 2, Leipzig, Berlin 1923, 3–198.
Galen, *De symptomatum causis*, in: Kühn C. G., *Claudii Galeni opera omnia*, vol. 7, Leipzig 1824, 147–204.
Galen, *De tremore, palpitatione, convulsione et rigore*, in Kühn C. G. *Claudii Galeni Opera Omnia*, repr. Hildesheim 1965.
Galen, *De tremore, palpitatione, convulsione et rigore liber*, in: Kühn C. G. (ed.), *Claudii Galeni opera omnia*, vol. 7, Leipzig, 1824, repr. Hildesheim 1965, 584–642.
Gregory of Nazianzus, *Carmina de se ipso*, MPG 37, 969–1029, 1166–1452.
Gregory of Nazianzus, *Carmina dogmatica*, MPG 37, 397–522.
Gregory of Nazianzus, *Carmina moralia*, MPG 37, 521–968.
Gregory of Nazianzus, *Contra Arianos et de seipso* (orat. 33), MPG 36, 213–237.
Gregory of Nazianzus, *Contra Julianum imperatorem* 1 (orat. 4), MPG 35, 532–664.
Gregory of Nazianzus, *De theologia (orat. 28)*, in: Barbel J. (ed.), *Die fünf theologischen Reden*, Düsseldorf 1963, pp. 62–126.
Gregory of Nazianzus, *Epistulae*, in: Gallay P. (ed.), *Lettres*, Paris 1964, 1967.
Gregory of Nazianzus, *Funebris oratio in laudem Basilii Magni Caesareae in Cappadocia episcopi (orat. 43), 16*, in: Boulenger F. (ed.), *Discours funèbres en l'honneur de son frère Césaire et de Basile de Césarée*, Paris 1908.
Gregory of Nazianzus, *Funebris oratio in patrem* (*orat. 18*), MPG 25, 985–1044.
Gregory of Nazianzus, *In Aegyptiorum adventum (orat. 34)*, MPG 36, 241–256.
Gregory of Nazianzus, *In laudem sororis Gorgoniae (orat. 8)*, MPG 35, 789–817.
Gregory of Nazianzus, *In sanctum baptisma (orat. 40)*, MPG 36, 360–425.
Gregory of Nazianzus, *Orat.* 2 (*Apologetica*), MPG 35, 408–513.
Gregory of Nazianzus, *Orationes*, NPNF, vol. 7.
Gregory the Great, *Epistles*, NPNF, vol. 13.
Hippocrates, vol. 1, LCL, transl. Jones W. H. S., ed. Page T. E., Capps E., Rouse W. H. D., Post L. A., Warmington E. H., London, Cambridge, MA 1948.
Hippocrates, vol. 2, LCL, transl. Jones W. H. S., ed. Page T. E., Capps E., Rouse W. H. D., Post L. A., Warmington E. H., London, Cambridge, MA 1923.
Hippocrates, vol. 3, LCL, transl. Whittington E. T., London, Cambridge, MA 1959.
Hippocrates, vol. 4, LCL, transl. Jones W. H. S., ed. Warmington E. H., London, Cambridge, MA 1967.
Hippocrates, vol. 5, LCL, transl. Potter P., ed. Goold G. P., London, Cambridge, MA 1988.

Hippocrates, vol. 6, LCL, transl. Potter P., ed. Goold G. P., London, Cambridge, MA 1988.
Hippocrates, vol. 7, LCL, transl. Smith W. D., ed. Goold G. P., London, Cambridge, MA 1994.
Hippocrates, vol. 8, LCL, transl. Potter P., ed. Goold G. P., London, Cambridge, MA 1995.
Historia Augusta, transl. Magie D., LCL, London 1922.
John Chrysostom, *Ad illuminandos catecheses 1–2 (series prima et secunda)*, MPG 49, 223–240.
John Chrysostom, *Ad Populum Antiochenum (homiliae 1–21)*, MPG 49, 15–222.
John Chrysostom, *Ad Theodorum lapsum (lib. 2)*, in: Dumortier J. (ed.), *Jean Chrysostome. A Théodore, Sources chrétiennes* 117, Paris 1966, 80–218.
John Chrysostom, *An address on vainglory and the right way for parents to bring up their children* (*de inani gloria et de educandis liberis*), transl. Laistner M. L. W, in: Laistner M. L. W. (ed.), *Christianity and Pagan culture in the later Roman Empire*, Ithaca, NY 1967.
John Chrysostom, *De diabolo tentatore (homiliae 1–3)*, MPG 49, 241–276.
John Chrysostom, *Epistulae ad Olympiadem (epist. 1–17)*, in: Malingrey A.-M., *Jean Chrysostome. Lettres à Olympias*, 2nd ed., *Sources chrétiennes* 13 bis. Paris 1968, 106–388.
John Chrysostom, *In Acta apostolorum (homiliae 1–55)*, MPG 60, 13–384.
John Chrysostom, *In epistulam ad Colossenses (homiliae 1–12)*, MPG 62, 299–392.
John Chrysostom, *In epistulam ii ad Corinthios (homiliae 1–30)*, MPG 61, 381–610.
John Chrysostom, *In epistulam ad Ephesios (homiliae 1–24)*, MPG 62, 9–176.
John Chrysostom, *In epistulam ad Galatas commentarius*, MPG 61, 611–682.
John Chrysostom, *In epistulam ad Philippenses (homiliae 1–15)*, MPG 62, 177–298.
John Chrysostom, *In epistulam ad Romanos (homiliae 1–32)*, MPG 60, 391–682.
John Chrysostom, *In epistulam ad Titum (homiliae 1–6)*, MPG 62, 663–700.
John Chrysostom, *In epistulam i ad Corinthios (homiliae 1–44)*, MPG 61, 9–382.
John Chrysostom, *In epistulam i ad Thessalonicenses (homiliae 1–11)*, MPG 62, 391–468.
John Chrysostom, *In epistulam i ad Timotheum (homiliae 1–18)*, MPG 62, 501–600.
John Chrysostom, *In epistulam ii ad Timotheum (homiliae 1–10)*, MPG 62, 599–662.
John Chrysostom, *In Joannem (homiliae 1–88)*, MPG 59, 23–482.
John Chrysostom, *In Matthaeum (homiliae 1–90)*, MPG 57, 13–472; MPG 58, 471–794.
John Chrysostom, *In paralyticum demissum per tectum*, MPG 51, 47–64.
John Malalas, *The chronicle of John Malalas*, transl. Jeffreys E., Jeffreys M., Scott R., Melbourne 1986.
John of Nikiu, *Chronicle*, transl. Charles R. H., Oxford 1916.
Julian, *Against the Galileans*, in: Wright W. C. (transl.), *The works of the Emperor Julian*, vol. I–III, London, New York 1913–1923.
Libanius, *Orations*, in: Foerster R. (ed.), *Libanii opera*, vol. 1–4, Leipzig 1.1–1.2:1903; 2:1904; 3:1906; 4:1908, repr. Hildesheim 1997.
Oribasius, *Collectiones medicae*, ed. Raeder J., *Oribasii collectionum medicarum reliquiae*, vol. 1–4, CMG 6.1.1–6.2.2, Leipzig, 6.1.1:1928; 6.1.2:1929; 6.2.1:1931; 6.2.2:1933.
Oribasius, *Euporistes*, in: Bussemaker U. C., Daremberg C., Oeuvres d'Oribase: texte grec, en grande partie inédit, collationné sur les manuscrits, vol. 6, Paris 1876.

Oribasius, *Synopsis ad Eustathium filium*, ed. Raeder J., *Oribasii synopsis ad Eustathium et libri ad Eunapium*, CMG 6.3. Leipzig 1926.

Paul of Aegina, *Epitome de medicine libri septem*, in: Adams F., *The seven books of Paulus Aegineta: translated from the Greek: with a commentary embracing a complete view of the knowledge possessed by the Greeks, Romans, and Arabians on all subjects connected with medicine and surgery*, London v. 1:1844, v. 2:1846, v. 3:1847.

Plutarch, *Moralia*, in: Babbit F. C. (transl.), *Plutarch's Moralia, in fifteen volumes*, vol. 4, Cambridge, MA, London 1962.

Priscus, *Fragmenta*, in: Muller C. W. (ed.), *Fragmenta historiorum graecorum*, vol. 4, Paris 1851.

Procopius, *Buildings*, transl. Dewing H. B., London, Cambridge, MA 1940.

Procopius, *History of the wars*, transl. Dewing H. B., London, New York 1914–1926.

Procopius, *The secret history with related texts*, transl. and ed. Kaldellis A., Indianapolis, Cambridge 2010.

Sidonius Apollinaris, *Poems and letters*, transl. Anderson W. B., London, Cambridge, MA 1965.

Socrates Scholasticus, *Historia ecclesiastica*, NPNF, vol. 2.

Sophronius of Jerusalem, *Laudatio SS. Cyri et Joannis, martyrum*, in: Bringel P. (ed.), *Panégyrique des saints Cyr et Jean, Patrologia Orientalis* 51.1 No 226. Turnhout 2008, 16–72.

Sozomen, *Historia ecclesiastica*, NPNF, vol. 2.

Suidae lexicon, ed. Adler A., Leipzig, 1.1:1928; 1.2:1931; 1.3:1933; 1.4:1935.

Tertullian, *Apology*, ed. Menzies A., ANF, vol. 3.

The chronicle of Theophanes Confessor. Byzantine and Near Eastern history AD 284–813, transl. Mango C., Scott R., Oxford 1997.

The miracles of St. Artemios. A collection of miracle stories by an anonymous author of seventh-century, transl. Crisafulli V. S., intr. Nesbitt J. W., Leiden, New York, Cologne 1997.

The Mishnah, ed. Neusner J., London, New Haven, CT 1998.

The Oneirocriticon of Daniel. The dreambook of the holy prophet Daniel with the help of the Holy God, according to the alphabet, in: Oberhelm S. M., *Dreambooks in Byzantium. Six* Oneirocritica *in translation, with commentary and introduction*, Aldershot 2008.

Theodoret, *Historia ecclesiastica*, NPNF, vol. 3.

The seven ecumenical councils of the undivided church, NPNF, vol. 2.

Vitruvius Pollio, *The ten books on architecture*, ed. Morgan M. H., London 1914.

Zosimus, *New history*, transl. Ridley R. T., Sydney 2004.

Secondary sources

Adams F., *The seven books of Paulus Aegineta: translated from the Greek: with a commentary embracing a complete view of the knowledge possessed by the Greeks, Romans, and Arabians on all subjects connected with medicine and surgery*, London v. 1:1844, v. 2:1846, v. 3:1847.

Aicher P. J., *Guide to the aqueducts of ancient Rome*, Wauconda, IL 1995.

Alföldy G., "Urban life, inscriptions, and mentality in late antique Rome", in: Burns T. S., Eadie J. W. (eds.), *Urban centres and rural contexts in late antiquity*, East Lansing, MI 2001, pp. 3–24.

Allbutt T. C., "Byzantine medicine – Finlayson memorial lecture", in: Allbutt T. C., *Greek medicine in Rome. The Fitzpatrick lectures on the history of medicine delivered at the Royal College of Physicians of London in 1909–1910, with other historical essays*, London 1921, pp. 389–424.

Alston R., *The city in Roman and Byzantine Egypt*, London and New York 2002.

Amundsen, D. W., "Medicine and faith in early Christianity", *Bulletin of the History of Medicine*, vol. 56, no. 3, 1982, pp. 326–350.

Appendino G., Pollastro F., Verotta L., Ballero M., Romano A., Wyrembek P., Szczuraszek K., Mozrzymas J. W., Taglialatela-Scafati O., "Polyacetylenes from Sardinian Oenanthe fistulosa: a molecular clue to risus sardonicus", *Journal of Natural Products*, vol. 72, no. 5, 2009, pp. 962–965.

Barefoot P., "Buildings for health: then and now", in: King H. (ed.), *Health in antiquity*, Abingdon 2005, pp. 205–215.

Barker J. W., *Justinian and the later Roman Empire*, Madison, Milwaukee, London 1966.

Barnes T., *Representation and reality in Ammianus Marcellinus*, Ithaca, NY 1998.

Barnes T., *Tertullian. A historical and literary study*, Oxford 1971.

Bassett S., *The urban image of the late antique Constantinople*, Cambridge 2004.

Berger A., *Das Bad in Der Byzantinischen Zeit*, Munich 1983.

Blyth P. N., "The consumption and cost of fuel in hypocaust baths", in: DeLaine J., Johnston D. E. (eds.), *Roman baths and bathing. Proceedings of the first international conference on Roman baths held at Bath, England, 30 March – 4 April 1992*. Part 1: *Bathing and society*, Portsmouth, RI 1999, pp. 89–98.

Bouras C., "Aspects of the Byzantine city, eighth-fifteenth centuries", in: Laiou A. E. (ed.), *The economic history of Byzantium*, vol. 2, Washington, DC 2002, pp. 497–528.

Bowen-Ward R., "Women in Roman baths", *Harvard Theological Review*, vol. 85, no. 2, 1992, pp. 125–147.

Brakke D., *Athanasius and the politics of asceticism*, Oxford 1995.

Brown P., *The making of late antiquity*, Cambridge, MA 1978.

Brown P., *The world of late antiquity*, London 1971.

Bruun Ch., "Imperial water pipes in Roman cities", in: Koloski-Ostrow A. O. (ed.), *Water use and hydraulics in the Roman city. Colloquium and conference papers series of the Archaeological Institute of America*, Dubuque, IA 2001, pp. 51–63.

Burton E., *A description of the antiquities and other curiosities of Rome*, London 1828.

Bury J. B., *A history of the later Roman Empire from Arcadius to Irene (395 A.D.–800 A.D.)*, London 1923.

Cameron A., *The Mediterranean world in Late Antiquity AD 395–600*, London 1993.

Cameron A., *Procopius and the sixth century*, London 1985.

Cameron A., Ward-Perkins B., Whitby M. (eds.), *The Cambridge ancient history*, vol. 14: *Late Antiquity: empire and successors, AD 425–600*, Cambridge 2001.

Clark G., "Bodies and blood: late antique debate on martyrdom, virginity and resurrection", in: Montserrat D., *Changing bodies, changing meanings. Studies on the human body in antiquity*, London, New York 1998, pp. 99–115.

Clark G., "The health of the spiritual athlete", in: King H. (ed.), *Health in antiquity*, Abingdon 2005, pp. 216–229.

Coates-Stephens R., "The walls and aqueducts of Rome in the early Middle Ages, AD500–1000", *Journal of Roman Studies*, vol. 88, 1998, pp. 166–178.

Coates-Stephens R., "The water-supply of Rome from Late Antiquity to the Early Middle Ages", *Acta ad archaeologiam et artium historiam pertinentia*, vol. 17, 2003, pp. 165–186.

Crislip A. T., *From monastery to hospital. Christian monasticism and the transformation of health care in late antiquity*, Ann Arbor, MI 2005.

Crislip A. T., *Thorns in the flesh. Illness and sanctity in Late Ancient Christianity*, Philadelphia 2013.

Croke B., "Malalas, the man and his work", in: Jeffreys E., Croke B., Scott R. (eds.), *Studies in John Malalas*, Byzantina Australiensia 6, Sydney 1990.

Crow J., Bardill J., Bayliss R., *The water supply of Byzantine Constantinople*, London 2008.

Cruse A., *Roman medicine*, Stroud 2004.

Cunliffe B., Tomlin R., *The Temple of Sulis Minerva at Bath*, v. II: *Finds from the Sacred Spring*, Oxford 1988.

Davis R. (ed.), *The book of pontiffs (liber pontificalis): the ancient biographies of the first ninety Roman bishops to AD 715*, Liverpool 1989.

DeLaine J., "Recent research on Roman baths", *Journal of Roman Archaeology*, vol. 1, 1988, pp. 11–32.

DeLaine J., Johnston D. E. (eds.), *Roman baths and bathing. Proceedings of the first international conference on Roman baths held at Bath, England, 30 March – 4 April 1992*. Part 1: *Bathing and society*, Portsmouth, RI 1999.

Drerup H., "Architerkturals Symbol", *Gymnasium*, vol. 73, 1966, pp. 181–196.

Drijvers J. W., *Helena Augusta. The mother of Constantine the Great and the legend of her finding the True Cross*, Leiden, Boston, MA 1992.

Duffy J., "Byzantine medicine in the sixth and seventh centuries: aspects of teaching and practice", *Dumbarton Oaks Papers*, vol. 38, 1984, pp. 21–27.

Edwards C., *Writing Rome: textual approaches to the city*, Cambridge 1996.

Eger A., "Age and male sexuality: 'queer space' in the Roman bath-house?", in: Harlow M., Laurence R. (eds.), *Age and ageing in the Roman Empire*, Portsmouth, RI 2007, pp. 131–152.

Eijk P. J. van der, "Divination, prognosis and prophylaxis: the Hippocratic work 'On Dreams' (De Victu 4) and its Near Eastern background", in: Horstmanshoff H. F. J., Stol M. (eds.), *Magic and rationality in ancient Near Eastern and Graeco-Roman medicine*, Leiden, Boston, MA 2004, pp. 187–218.

Eliav Y. Z., "The Roman bath as a Jewish institution: another look at the encounter between Judaism and the Greco-Roman culture", *Journal for the Study of Judaism in the Persian, Hellenistic and Roman Period*, vol. 31, no. 4, 2000, pp. 416–454.

Evans H. B., *Water distribution in ancient Rome. The evidence of Frontinus*, Ann Arbor, MI 1998.

Evans J. A., *Empress Theodora. The partner of Justinian*, Austin, TX 2004.

Fagan G. G., *Bathing in public in the Roman world*, Ann Arbor, MI 1999.

Fagan G. G., "Interpreting the evidence. Did slaves bathe at the baths?", in: DeLaine J., Johnston D. E. (eds.), *Roman baths and bathing. Proceedings of the first international conference on Roman baths held at Bath, England, 30 March – 4 April 1992*. Part 1: *Bathing and society*, Portsmouth, RI 1999, pp. 25–34.

Ferguson E., *Baptism in the early Church: history, theology, and liturgy in the first five centuries*, Cambridge, MA 2009.

Ferguson J., *Clement of Alexandria*, New York 1974.

Fox S. C., "Health in Hellenistic and Roman times: the case studies of Paphos, Cyprus and Corinth, Greece", in: King H. (ed.), *Health in antiquity*, Abingdon 2005, pp. 59–82.

Gates C., *Ancient cities. The archaeology of urban life in the Ancient Near East and Egypt, Greece and Rome*, London, New York 2003.

Gibbon E., *The history of the decline and fall of the Roman Empire*, London 1776–1789.

Ginouvès R., *Balaneutike. Recherches sur le bain dans l'antiquité grecque*, Paris 1962.

Grant M., *The fall of the Roman Empire*, London 2005.

Greatrex G., "The Nika riot: a reappraisal", *The Journal of Hellenic Studies*, vol. 117, 1997, pp. 60–86.

Gregory, T. E., Scarborough, J., "Aetios of Amida", in: *The Oxford dictionary of Byzantium*, ed. Kazhdan A. P., Oxford 1991.

Haan N. de, "Si aquae copia patiatur: Pompeian private baths and the use of water", in: Koloski-Ostrow A. O. (ed.), *Water use and hydraulics in the Roman city. Colloquium and conference papers series of the Archaeological Institute of America*, Dubuque, IA 2001, pp. 41–49.

Harries J., *Sidonius Apollinaris and the fall of Rome AD 407–485*, Oxford 1985.

Hill G. F., "Apollo and St. Michael: some analogies", *Journal of Hellenic Studies*, vol. 36, 1916, pp. 134–162.

Hodge A. T., *Roman aqueducts and water supply*, London 1992.

Horstmanshoff H. F. J., "Asclepius and temple medicine in Aelius Aristides' Sacred Tales", in: Horstmanshoff H. F. J., Stol M. (eds.), *Magic and rationality in ancient Near Eastern and Graeco-Roman medicine*, Leiden, Boston, MA 2004, pp. 325–341.

Horstmanshoff H. F. J., Stol M. (eds.), *Magic and rationality in ancient Near Eastern and Graeco-Roman medicine*, Leiden, Boston, MA 2004.

Hoss S., *Baths and bathing. The culture of bathing and the baths and* thermae *in Palestine from the Hasmoneans to the Moslem conquest*, Oxford 2005.

Howard-Johnston J. D. (ed.), *East Rome, Sasanian Persia and the end of antiquity*, Aldershot 2006.

Howard-Johnston J. D., "The siege of Constantinople in 626", in: Mango C., Dagron G. (eds.), *Constantinople and its hinterland. Papers from the Twenty-seventh Spring Symposium of Byzantine Studies, Oxford, April 1993*, Aldershot 1995, pp. 131–142.

Hunt D., "The Christian context of Julian's *Against the Galileans*", in: Tougher, S., Baker-Brian, N. (eds.), *Emperor and author. The writings of Julian the Apostate*, Swansea 2012, pp. 251–261.

Israelowich I., *Patients and healers in the High Roman Empire*, Baltimore 2015.

Jackson R., "Waters and spas in the classical world", *Medical History*, supplement no. 10, 1990.

Jacobelli L., *Le pitture erotiche delle Terme Suburbane di Pompei*, Rome 1995.

Janin R., *Constantinople Byzantine. Développement urbain et répertoire topographique*, éd. 2, Paris 1964.

Jansen G. C. M., "Water pipe system in the houses of Pompeii. Distribution and use", in: Koloski-Ostrow A. O. (ed.), *Water use and hydraulics in the Roman city. Colloquium and conference papers series of the Archaeological Institute of America*, Dubuque, IA 2001, pp. 27–40.

Jeffreys E., Croke B., Scott R. (eds.), *Studies in John Malalas*, Byzantina Australiensia 6, Sydney 1990.

Jeffreys M., "Bury, Malalas and the Nika Riot", in: Allen P., Jeffreys E. (eds.), *The sixth century. End or beginning,* Byzantina Australiensia 10, Brisbane 1996, pp. 42–51.

Kaldellis A, "Christodoros on the statues of the Zeuxippus baths: a new reading of the *Ekphrasis*", *Greek, Roman, and Byzantine Studies*, vol. 47, 2007, pp. 361–383.

Kaldellis A., *Hellenism in Byzantium. The transformations of Greek identity and the reception of the Classical tradition*, Cambridge 2007.

Kaldellis A., *Procopius of Caesarea. Tyranny, history, and philosophy at the end of antiquity*, Philadelphia 2004.

Kazhdan A. P. and Epstein A. W., *Change in Byzantine culture in the eleventh and twelfth centuries*, Oakland, CA 1985.

King H. (ed.), *Health in antiquity*, Abingdon 2005.

Koloski-Ostrow A. O., "Water as symbol of wealth? An overview of the Roman evidence", in: Koloski-Ostrow A. O. (ed.), *Water use and hydraulics in the Roman city. Colloquium and conference papers series of the Archaeological Institute of America*, Dubuque, IA 2001, pp. 1–15.

Koloski-Ostrow A. O. (ed.), *Water use and hydraulics in the Roman city. Colloquium and conference papers series of the Archaeological Institute of America*, Dubuque, IA 2001.

Kompa A., Leszka M. J., Marinow K. (eds.), *Konstantynopol. Nowy Rzym. Miasto i ludzie w okresie wczesnobizantyjskim*, Warsaw 2011.

Krawczyk M., "Flawiusz Hermogenes – *magister equitum* Konstancjusza II czy *praeses provinciae Scythiae*?", *U schyłku starożytności. Studia źródłoznawcze*, vol. 15, 2016, pp. 31–40.

Lainster M. L. W. (ed.), *Christianity and Pagan culture in the later Roman Empire*, Ithaca, NY 1967.

Langhof V., "Structure and genesis of some Hippocratic treatises", in: Horstmanshoff H. F. J., Stol M. (eds.), *Magic and rationality in ancient Near Eastern and Graeco-Roman medicine*, Leiden, Boston, MA 2004, pp. 219–275.

Lavan L. A., "Social space in late antiquity", in: Lavan L., Swift E., Putzeys T. (eds.), *Objects in context, objects in use: material spatiality in late antiquity*, Leiden, Boston, MA 2008, pp. 129–157.

Lefort J., "Les communications entre Constantinople et la Bithynie", in: Mango C., Dagron G. (eds.), *Constantinople and its hinterland. Papers from the Twenty-seventh Spring Symposium of Byzantine Studies, Oxford, April 1993*, Aldershot 1995, pp. 207–218.

Leven K.-H., "'At times these ancient facts seem to lie before me like a patient on a hospital bed' – retrospective diagnosis and ancient medical history", in: Horstmanshoff H. F. J., Stol M. (eds.), *Magic and rationality in ancient Near Eastern and Graeco-Roman medicine*, Leiden, Boston, MA 2004, pp. 369–386.

Liebeschuetz J. H. W. G., *Decline and fall of the Roman city*, Oxford 2001.

Liebeschuetz J. H. W. G., "The end of the ancient city", in: Rich J. (ed.), *The city in late antiquity*, London 1992, pp. 1–49.

Lössl J., "Augustine's *Confessions* as a *consolation of philosophy*", in: Berg, J. A. van den, Kotzé A., Niclas T., Scopello M. (eds.), *"In search of truth": Augustine, Manichaeism and other Gnosticism. Studies for Johannes van Oort at sixty*, Leiden, Boston, MA 2011, pp. 47–74.

Maas M. (ed.), *The Cambridge companion to the age of Justinian*, Cambridge 2005.

Magdalino P., "Medieval Constantinople", in: *Studies on the history and topography of Byzantine Constantinople*, Burlington, VT 2007. Reprint of: *idem, Constantinople Mediévale. Ètudes sur l'évolution des structures urbaines*, Paris 1996, pp. 7–117.

Mango C., Dagron G. (eds.), *Constantinople and its hinterland. Papers from the Twenty-seventh Spring Symposium of Byzantine Studies, Oxford, April 1993*, Aldershot 1995.
Markschies C., *Between two worlds. Structures of earliest Christianity*, London 1999.
Maxwell J. L., *Christianization and communication in Late Antiquity*, Cambridge 2006.
Meeks, W. A., Bassler, J. M. (eds.), *The HarperCollins study Bible. New revised standard version*, New York 1989.
Miller T. S., "Byzantine hospitals", *Dumbarton Oaks Papers*, vol. 38, 1984, pp. 53–63.
Miller T. S., *The birth of the hospital in the Byzantine Empire*, Baltimore, London 1997.
"Monthly report on dracunculiasis cases, January 2013 – first month with zero cases", *Weekly Epidemiological Report* (WHO), 15 March 2013, year 88, vol. 11, p. 128.
Montserrat D., "'Carrying on the work of the earlier firm': doctors, medicine and Christianity in the Thaumata of Sophronius of Jerusalem", in: King H. (ed.), *Health in antiquity*, Abingdon 2005, pp. 230–242.
Morley N., "The salubriousness of the Roman city", in: King H. (ed.), *Health in antiquity*, Abingdon 2005, pp. 192–204.
Müller-Wiener W., *Bildlexikon zur Topographie Istanbuls: Byzantion, Konstantinupolis, Istanbul bis zum Beginn d. 17 Jh.*, Tübingen 1977.
Nielsen I., *Thermae et balnea: the architecture and cultural history of Roman public baths*, Aarhus 1990.
Nielsen I., "Early provincial baths and their relations to early Italic baths", in: DeLaine J., Johnston D. E. (eds.), *Roman baths and bathing. Proceedings of the first international conference on Roman baths held at Bath, England, 30 March – 4 April 1992*. Part 1: *Bathing and society*, Portsmouth, RI 1999, pp. 34–44.
Norwich J. J., *Byzantium: the early centuries*, London 1988.
Nutton V., *Ancient medicine*, London 2004.
Nutton V., "Byzantine medicine, genres, and the ravages of time", in: Zipser B. (ed.), *Medical books in the Byzantine world*, Bologna 2013, pp. 7–18.
Nutton V., "From Galen to Alexander. Aspects of medicine and medical practice in Late Antiquity", *Dumbarton Oaks Papers*, vol. 38, 1984, pp. 1–14.
Odahl C. M., *Constantine and the Christian Empire*, London, New York 2004.
O'Donnell J. J., *The ruin of the Roman Empire*, London 2009.
Osborn E., *Tertullian, first theologian of the West*, Cambridge 2003.
Owens E. J., "The Kremna Aqueduct and water supply in Roman cities", *Greece and Rome*, vol. 38, no. 1, 1991, pp. 41–42.
Percival J., "Desperately seeking Sidonius: the realities of life in fifth-century Gaul", *Latomus*, vol. 56, 1977, pp. 284–287.
Pormann P. E., "Paulos of Aigina", in: *The encyclopaedia of ancient natural scientists*, ed. Keyser, P. T., Irby-Massie, G. L., London 2008, p. 629.
Potter T. W., "Towns and territories in southern Etruria", in: Rich, J., Wallace-Hadrill A. (eds.), *City and country in the ancient world*, London, New York 1994, pp. 191–209.
Prostko-Prostyński J., *Iudicium quinquevirale. Sąd senatorski w Rzymie i Konstantynopolu od Gracjana do Justyniana*, Poznań 2008.
Rice T. T., *Everyday life in Byzantium*, New York 1967.
Rich J., Wallace-Hadrill A. (eds.), *City and country in the ancient world*, London, New York 1994.
Sandwell I., *Religious identity in Late Antiquity. Greeks, Jews and Christians in Antioch*, Cambridge 2007.
Sarris P., *Empires of faith. The fall of Rome to the rise of Islam, 500–700*, Oxford 2011.

Satlow M. L., "Jewish constructions of nakedness in Late Antiquity", *Journal of Biblical Literature*, vol. 116, no. 3, 1997, pp. 429–454.
Scarborough J., *Roman medicine*, London, Southampton 1969.
Scarborough J., "Galen", in: *The Oxford dictionary of Byzantium*, ed. Kazhdan A. P., Oxford 1991.
Scarborough J., "Oribasios", in: *The Oxford dictionary of Byzantium*, ed. Kazhdan A. P., Oxford 1991.
Scarborough J. et al., "Alexander of Tralles", in: *The Oxford dictionary of Byzantium*, ed. Kazhdan A. P., Oxford 1991.
Scarborough J, Talbot A.-M., "Paul of Aegina", in: *The Oxford dictionary of Byzantium*, ed. Kazhdan A. P., Oxford 1991.
Sigerist H. E., A *history of medicine*, vol. 2, Oxford 1987.
Smith K. F., "Drama (Roman)", in: *Encyclopedia of religion and ethics*, ed. Hastings J., v. 4, New York 1932, pp. 898–907.
Smith R., *Julian's gods: religion and philosophy in the thought and action of Julian the Apostate*, London 1995.
Spieser J.-M., *Urban and religious spaces in Late Antiquity and early Byzantium*, Aldershot 2001.
Squatriti P., *Water and society in early medieval Italy*, *AD 400–1000*, Cambridge 1998.
Stannard J., "Aspects of Byzantine materia medica", *Dumbarton Oaks Papers*, vol. 38, 1984, pp. 205–211.
Stockhausen, A. von, "Christian perception of Jewish preaching in early Christianity?", in: Deeg A., Homolka W., Schöttler H.-G. (eds.), *Preaching in Judaism and Christianity*, Berlin 2008, pp. 49–70.
Temkin O., *Hippocrates in a world of Pagans and Christians*, Baltimore, London 1991.
The Oxford dictionary of Byzantium, ed. Kazhdan A. P., Oxford 1991.
Tomlin R., "The curse tablets", in: Cunliffe B., Tomlin R., *The temple of Sulis Minerva at Bath*, v. II: *Finds from the Sacred Spring*, Oxford 1988, pp. 59–277.
Treadgold W., *A history of the Byzantine state and society*, Stanford, CA 1997.
Van Dam R., *Families and friends in Late Roman Cappadocia*, Philadelphia 2003.
Voultsiadou E., "Sponges: an historical survey of their knowledge in Greek antiquity", *Journal of the Marine Biological Association of the United Kingdom*, vol. 87, 2007, pp. 1757–1763.
Wallace-Hadrill D. S., *Christian Antioch. A study of the early Christian thought in the East*, Cambridge 1982.
Ward-Perkins B., *The fall of Rome and the end of civilization*, Oxford 2005.
Ward-Perkins B., "Specialized production and exchange", in: Cameron A., Ward-Perkins B., Whitby M. (eds.), *The Cambridge ancient history,* vol. 14: *Late Antiquity: empire and successors, AD 425–600*, Cambridge 2001, pp. 346–391.
Webb R., *Demons and dancers: performance in late antiquity*, Cambridge, MA 2008.
Wilkes J. J., "Approaching Roman baths", in: DeLaine J., Johnston D. E. (eds.), *Roman baths and bathing. Proceedings of the first international conference on Roman baths held at Bath, England, 30 March – 4 April 1992*. Part 1: *Bathing and society*, Portsmouth, RI 1999, pp. 17–23.
Wilson A., "Urban water storages, distribution and usage in Roman North Africa", in: Koloski-Ostrow A. O. (ed.), *Water use and hydraulics in the Roman city. Colloquium and conference papers series of the Archaeological Institute of America*, Dubuque, IA 2001, pp. 83–96.
Wilson J. F., *Caesarea Philippi. Banias, the lost city of Pan*, New York, London 2004.

Yegul F., *Bathing in the Roman world*, Cambridge University Press, Cambridge 2009.
Zajac N., "The thermae: a policy of public health or personal legitimation?", in: DeLaine J., Johnston D. E. (eds.), *Roman baths and bathing. Proceedings of the first international conference on Roman baths held at Bath, England, 30 March – 4 April 1992*. Part 1: *Bathing and society*, Portsmouth, RI 1999, pp. 99–105.
Zipser B. (ed.), *Medical books in the Byzantine world*, Bologna 2013.
Zytka M. J., "Power and patronage in the late antique bathing culture", in: Bilsel, C., Esmark, K., Kizilÿurek, N., Rastarick, Ó. (eds.), *Constructing cultural identity, representing social power*, Pisa 2010, pp. 117–138.

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